

**DESCRIPTION AND PRELIMINARY INTERPRETATION OF
CORE CL-80-2, CLEAR LAKE, LAKE COUNTY, CALIFORNIA**

by

John D. Sims, Michael J. Rymer, James A. Perkins, and Larry A. Flora

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ABSTRACT

Coring operations in the west basin of Clear Lake produced a regional Quaternary reference section to augment and extend a previous study of cores from Clear Lake. This report concerns 165.8-m-long core CL-80-2, which was continuously cored in 8.0 m of water and has a 65.0 percent recovery. The sediments in core CL-80-2 are composed primarily of clayey and silty sapropelic mud that is similar to those presently being deposited in the lake. The core ended in coarse CO₂-charged sand at 165.8 m. The age of sediment at the bottom of the core is inferred to be approximately 175,000 years.

INTRODUCTION

Clear Lake is located about 120 km north of San Francisco and lies in a fault-bounded, seismically active intermontane valley north of the Geysers geothermal field (fig. 1). Two cores, 177.0 and 165.8 m long, were taken in the lake in July and August 1980 for multidisciplinary studies to determine the stratigraphic, tectonic, paleontologic, and paleoclimatic history of the Clear Lake basin (Sims and Rymer, 1981). The objectives of these studies are (1) to determine the stratigraphic characteristics useful for developing a reference section for correlation with other late Quaternary continental and marine deposits and (2) to characterize the late Quaternary paleoclimatic record and tectonic framework of the area. This report is concerned with the detailed description and results of preliminary analyses of CL-80-2. A brief description of the geomorphology, geology, and geologic history of the Clear Lake basin is summarized by Sims, Rymer and Perkins (1981).

Prior to the current coring operations eight cores, ranging in length from 13.9 to 115.2 m, were taken in Clear Lake in 1973 (fig. 1, table 1). Analyses of these cores yielded a continuous lithostratigraphic and biostratigraphic record from which a history of volcanic activity, sedimentation, tectonism, and paleoclimate was reconstructed (Sims and Rymer, 1975a; Sims, 1976; Casteel and others, 1977; Sims, 1981a; Sims and White, 1981; Adam and others, 1981). The longest of these cores, core CL-73-4 (table 1), allowed the determination of the major part of this history from the present to about 130,000 years ago (Sims, Adam, and Rymer, 1981; Adam and others, 1981).

Analysis of the earlier cores shows that sedimentation in Clear Lake has varied significantly from the sapropelic mud that is presently being deposited. Kelsey Creek was a major source of sediment influx to the lake throughout the late Pleistocene and Holocene. In late Pleistocene time Kelsey Creek carried coarse clastic debris into the lake to form a delta-like wedge-shaped mass of sediments (Sims, 1976). These coarse deltaic sediments extend northward from the mouth of Kelsey and Adobe Creeks into the lake, and were deposited between 40,000 and 10,000 years ago (Sims, 1976). Following deposition of this coarse clastic wedge, deposition of sapropelic mud characteristic of present-day open-lake conditions resumed. Similarly, but to a lesser extent, creeks in the Upper Lake area have periodically brought sand and gravel into the lake. The two arms of the lake (fig. 1) contain abundant peat beds that accumulated in water <2 m deep. Peat deposition terminated in the arms about 11,000 years ago when the water depth abruptly increased to <2 m and sediment dominated by sapropelic mud began accumulating (Sims, 1976). The youngest peat deposits cored in the Highlands Arm of Clear Lake are overlain by 6.9 m of sapropelic mud and 12.5 m of water, suggesting that about 17 m of vertical movement has occurred since about 10,000 yr B.P. (Sims and Rymer, 1975b).

Sediments in 177.0-m-long core CL-80-1 consist of clayey to silty sapropelic mud interbedded with clayey silt, sand, and minor gravel, all interbedded with thin ash beds. Coarse sand and gravel occur between 151.8 and 159.3 m and below 165.8 m in core CL-80-1 (Sims, Rymer, and Perkins, 1981). Preliminary palynological analyses by Heusser and Sims (1981) and stratigraphic correlations with the earlier cores suggest that core CL-80-1 is approximately 175,000 years old at its base (Sims, Rymer, and Perkins, 1981).

Pleistocene lacustrine deposits older than those in cores from Clear Lake taken in 1973 and 1980 (Sims, 1976; Sims and Rymer, 1981) are found in isolated outcrops and in water wells dug in alluviated valleys near the lake. These older lacustrine deposits, referred to as the Lower Lake and Kelseyville

Formations (Rymer, 1981), are present near the south end of the Highlands Arm and in Big Valley. The Lower Lake and Kelseyville Formations were presumably deposited in separate subbasins of the same lake, and are possibly in part correlative with sediment beneath Clear Lake (Rymer, 1981). Pleistocene and Holocene lacustrine deposits are also present in the Upper Lake area, north of the west basin of the lake (Lake County Flood Control and Water Conservation District, 1978).

Core CL-80-2 was taken using rotary, wireline, continuous-coring methods from a barge-mounted drill rig anchored in the lake. The core is 6 cm in diameter and was removed in 3.05-m-long segments. Recovered core segments were transported to Menlo Park for later subsampling. Prior to subsampling



Figure 1. Map showing the location of cores CL-80-1 and CL-80-2 in Clear Lake, California. Core sites with single-digit numbers are from the 1973 coring program (Sims, 1976) and have prefixes CL-73. See table 1 for lengths and recovery rates of the various cores.

Table 1. Total length, recovery percent, number of ash beds, and estimated maximum age for cores from Clear Lake, Calif. (modified from Sims, 1976).

Core No.	Water Depth (meters)	Core Length (meters)	Recovery (percent)	Number of ash beds	Estimated age of core bottom (yr)
80-1	7.5	177.0	66.7	54	175,000
80-2	8.0	165.8 ^{1/}	65.0 ^{2/}	23	175,000
73-1	8.8	52.6	35.0	6	40,000
73-2	4.3	13.9	88.0	0	10,000-15,000
73-3	8.4	69.0	96.0	43	36,000
73-4	8.4	115.2	92.0	56	130,000
73-5	7.6	22.6	94.0	7	28,000
73-6	12.2	21.6	99.0	8	36,000
73-7	12.8	27.4	94.9	26	40,000
73-8	5.2	20.5	99.6	5	24,000

^{1/} Core length for core CL-80-2 calculated from top of sediment column to lowest attempted coring depth, even though the intervals from 0 to 53.42 m and 77.20 to 98.68 m were drilled out.

^{2/} Recovery percent calculated for cored segments of lake sediment and does not include drilled out segments.

each segment was first split lengthwise, photographed using both black-and-white and color film, and described (see Appendix A for detailed descriptions). An 8-mm-thick slice was then removed from one of the segment halves and X-ray radiographed. The developed radiograph was examined to determine the extent of sediment disruption and the amount of debris included in the top of the core segment. The radiographed slice and one of the segment halves were then cut up for individual subsamples. The remaining core half was sealed in a 6-mil polyethylene bag as an archive sample. A full description of the methods of sampling, laboratory procedures, and a catalog of the samples taken is summarized in Appendix B.

RESULTS

Two intervals were continuously cored at site CL-80-2. Parts of the sediment column were not cored because: (1) site CL-80-2 is close to site CL-73-4 and the uncored intervals of CL-80-2 are represented in the latter core, and (2) the procedure used was less expensive than complete recoring of those intervals represented in core CL-73-4. Thus, the interval between 0.0 and 53.4 m was not cored. The interval between 53.4 m and 78.2 m was cored in order to intercept a prominent ash bed that was recovered in cores CL-73-4 and CL-80-1 (Sims, 1976; Sims, Rymer, and Perkins, 1981). No core was taken between 78.2 m and 98.7 m because this interval is represented in core CL-73-4. Continuous coring was resumed at 98.7 m in order to overlap the lowest part of core CL-73-4 and to facilitate matching up the two cores. Coring continued to the maximum depth at 165.8 m (fig. 2). The overall recovery rate for the cored part of CL-80-2 is 65.0 percent. Recovered intervals are listed in table 2 and shown in figure 2.

Sediments in core CL-80-2 consist of dark-olive-gray clayey to silty sapropelic mud to a depth of 165.7 m (table 3). At 165.8 m CO-charged sand was encountered and coring operations were terminated. Twenty-three ash beds were recovered in core CL-80-2 (table 4). The marker ash bed sought when

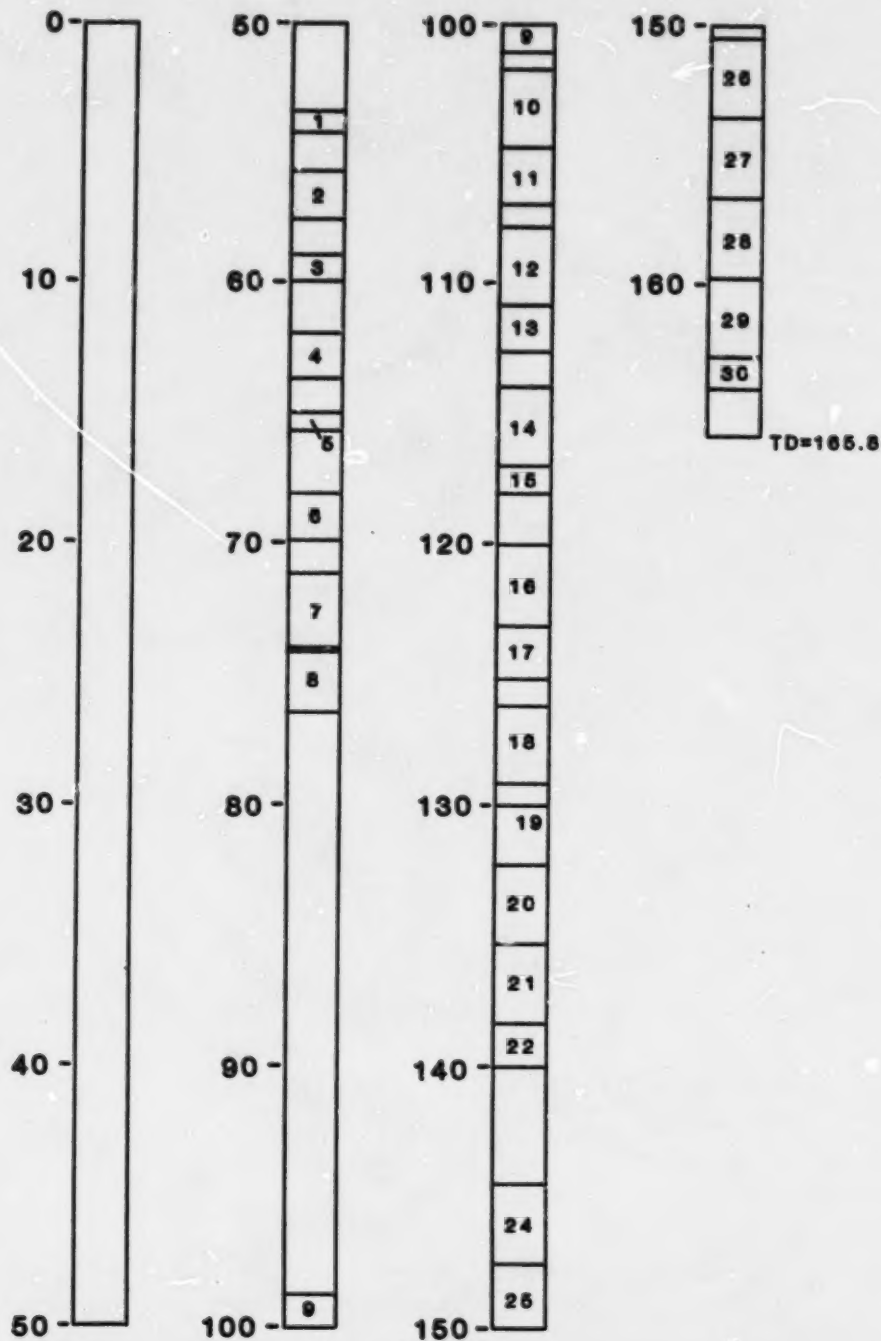


Figure 2. Recovered intervals for core CL-80-2. Numbered sections represent recovered intervals and correspond to segment numbers in the detailed graphic log (Appendix A). Unnumbered sections represent intervals in which no coring was attempted or of no recovery. Total recovery for the intervals for which sampling was attempted is 65 percent.

Table 2. Recovered intervals from Clear Lake core CL-80-2. Depth intervals not represented by an entry are missing sections or intervals that were not cored.

Segment	Recovered Top (cm)	Interval Bottom (cm)	Total Recovery (cm)	Segment	Recovered Top (cm)	Interval Bottom (cm)	Total Recovery (cm)
1	5342	5462	120	16	12002	12309	307
2	5586	5757	171	17	12309	12592	273
3	5890	5993	103	18	12613	12915	302
4	6195	6366	171	19	12918	13006	88
5	6500	6565	65	20	13223	13528	305
6	6805	6985	180	21	13528	13755	227
7	7110	7389	279	22	13822	14089	267
8	7415	7645	230	23	-	1/ 14748	-
9	9868	10113	245	24	14443	14918	305
10	10173	10482	309	25	14748	2/ 14918	170
11	10478	10591	113	26	-	-	-
12	10782	11087	305	27	15358	15663	305
13	11087	11259	172	28	15663	15810	147
14	11392	11695	303	29	15968	16252	284
15	11697	11796	99	30	16273	16403	130
							5975

1/ No sample recovered

2/ Segment missing

Table 3. Summary of lithology of Clear Lake core CL-80-2.

Depth Interval (cm)	Lithology
0-5342	Drilled out.
5342-6805	Mud, olive-gray (5Y 4/2), faintly wavy-laminated to massive.
6805-7645	Mud, olive-gray (5Y 4/2), massive, carbonaceous throughout.
7645-9868	Drilled out.
9868-11259	Clay, olive-gray (5Y 4/2), massive, contains abundant carbonaceous material.
11393-12513	Clay, olive-gray (5Y 4/2), massive and bioturbated.
12613-14089	Clay, olive-gray (5Y 4/2), massive and bioturbated to 13528 cm, parallel lamination to 14139 cm.
14089-14443	Missing.
14443-14912	Clay, olive-gray (5Y 4/2) to dark-gray (5Y 4/1), has lenticular wavy lamination.
14912-15358	Missing.
15358-16403	Clay, olive-gray (5Y 4/2), has lenticular wavy lamination to 15663 cm, massive to 16050 cm, and wavy to parallel lamination to bottom.

1/ Color designations are from Munsell Products (1973).

coring the interval 53.4-78.2 m was not found; however, it may lie in an unrecovered part of that interval.

Volumetric samples were taken at about 2 m intervals for analysis of bulk density, water content, and organic and inorganic carbon content. Cylindrical samples for these analyses were taken using a piston-type sampler with a calibrated volume of 1.7 cm³ (Beaver and others, 1976). The samples were

Table 4. Ash bed depth, thickness, and identification criteria in core CL-80-2.

Ash No. 1/	Depth to Top (cm)	Thickness (cm)	Confidence 2/
1	5453 3/	1	-
2	10351	3	-
3	10510	4	+
4	10581	3	+
5	10860	3	+
6	10459	2	-
7	12089	6	+
8	13462	1	-
9	13539	2	+
10	14479	4	+
11	14610	8	-
12	14748	7	+
13	15553	3	-
14	15591	4	-
15	15632	2	-
16	15780	3	-
17	16005	3.5	-
18	16036	0.5	+
19	16099	4	-
20	16123	4	+
21	16173	1	-
22	16326	3	-
23	16374	3	-

1/ Ashes numbered serially from the top of the core.

2/ + = Definite ash bed, identified on texture, color, and megascopic properties.

- = Probable ash identified from radiographic properties.

= = Possible ash, identified from radiographic properties.

3/ No ashes are reported from intervals 0 to 53.42 m and 78.20 to 98.68 m because these intervals were not cored.

weighed, dried at 105°C for 8 hr, and ashed at 550°C and 950°C for 4 hr each for the respective analyses. Weight loss on drying at 105°C records water content of the sediment. However, these determinations are not reliable because of desiccation of the core before subsampling. Determinations of organic and inorganic carbon contents are reliable and vary from 0.8 to 12 percent for organic carbon and from 0.5 to 14 percent for inorganic carbon (fig. 3). Extreme values are probably due to samples taken in localized slightly organic-rich horizons such as at 114.48 m. One series of samples between 110 and 122 m shows consistently high organic and inorganic carbon contents (fig. 3).

Quantitative clay mineralogy of samples at <1 m intervals from core CL-80-2 using the methods of Schultz (1963) show little systematic variation (fig. 4). Values for smectite content vary from 11 to 29 percent and average 18 percent, chlorite ranges from 0 to 45 percent, with an average of 31 percent, kaolinite ranges from 0 to 16 percent with an average of 7 percent, illite ranges from 11 to 39 percent with an average of 28 percent, and mixed layer clay minerals range from 0 to 54 percent with an average of 16 percent (table 5).

Grain size analyses were not done on core CL-80-2 because these analyses

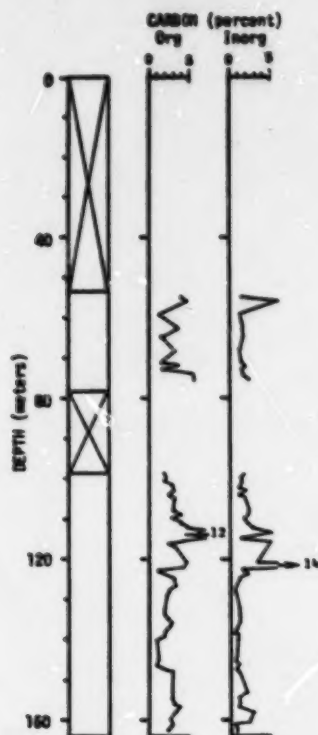


Figure 3. Plot of organic and inorganic carbon contents. Sections of no data represent drilled out intervals.

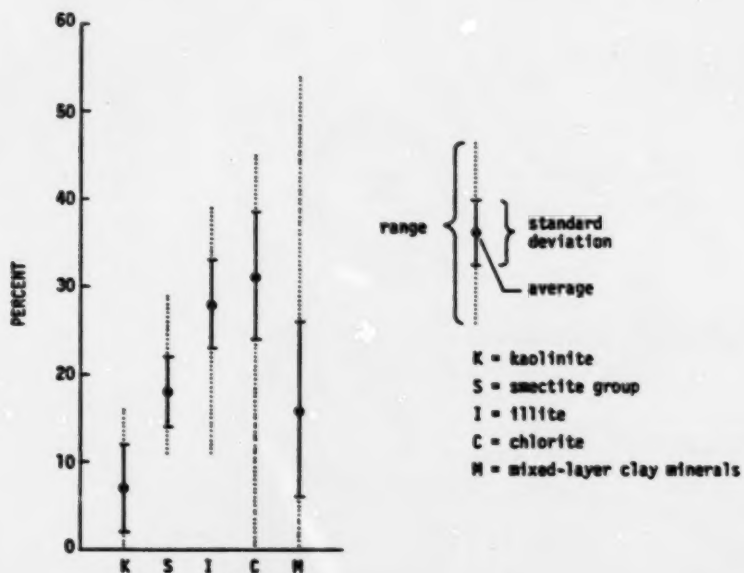


Figure 4. Quantitative clay mineral analytical data for various species of clay minerals present in core CL-80-2.

Table 5. Quantitative clay mineralogy, core CL-80-2.

Sample No.	Depth (cm)	Smectite (%)	Chlorite (%)	Illite (%)	Kaolinite (%)	Mixed Layer (%)	Total (%)
004	5607	14	34	29	1	21	99
008	5707	20	30	22	9	19	100
012	5942	21	25	27	14	14	102
016	6284	17	31	24	16	12	100
020	6540	21	32	20	8	19	100
023	6857	21	24	29	14	12	100
028	7132	21	30	23	0	26	100
044	7551	23	30	23	9	15	100
048	9874	18	30	24	5	22	99
052	9974	21	30	29	7	13	100
056	10074	17	30	30	6	16	99
060	10243	15	39	28	2	16	100
064	10343	16	34	26	6	17	99
068	10443	20	35	30	0	17	102
072	10538	16	25	38	16	5	100
080	10929	17	31	29	8	16	100
084	11029	16	39	33	2	10	100
092	11230	17	29	20	6	27	99
106	11780	16	39	30	0	17	102
110	12090	27	45	31	2	0	105
114	12190	21	32	27	13	5	99
118	12290	29	19	25	13	14	100
122	12390	25	0	22	0	54	101
126	12505	16	41	37	6	0	100
134	12823	16	30	25	7	22	100
138	12931	18	33	29	12	8	100
142	13276	17	32	30	12	9	100
146	13376	10	34	29	15	13	101
150	13476	13	31	30	9	17	100
154	13580	20	32	29	2	17	101
158	13680	15	36	25	7	17	100
162	13837	18	37	36	8	2	101
166	13937	25	35	28	2	9	99
169	14057	12	31	25	11	22	100
170	14447	15	25	30	16	14	100
174	14547	12	27	24	15	22	100
178	14647	17	31	32	10	11	100
180	14725	16	28	33	10	13	100
184	14825	11	26	11	6	46	100
188	15378	24	41	39	0	0	104
192	15503	12	27	25	3	32	100
196	15603	22	34	34	0	12	102
200	15703	15	26	25	13	20	99
208	16043	19	24	21	5	31	100
212	16143	18	31	36	11	4	100
216	16243	17	28	26	6	23	100
220	16354	11	40	35	6	8	100

were performed on nearby core CL-73-4, which is similar in lithology to core CL-80-2 and shows little grain size variation. In core CL-73-4 the phi mean size ($\bar{\phi}$) ranges from 7.93 to 9.21 (Sims, 1982). There is no systematic variation in the data. These results are at variance with those of Sims, Adam, and Rymer (1981). The reason for the discrepancy is that the grain size analyzer used for determining the data in Sims, Adam, and Rymer had unknowingly malfunctioned.

DISCUSSION

The dating of core CL-80-2 is difficult because no radiometric dates are available from it nor have pollen analyses been performed on its samples. Thus, the precise age of the core can not be determined. However, age assignments for cores CL-80-1 and CL-73-4 have been made using a variety of dating methods, and correlations with core CL-80-2 can be made. Pollen analyses from cores CL-73-4 and CL-80-1 show that pollen zones are correlative with 180 stages from deep-sea cores (Sims, Adam, and Rymer, 1981; Heusser

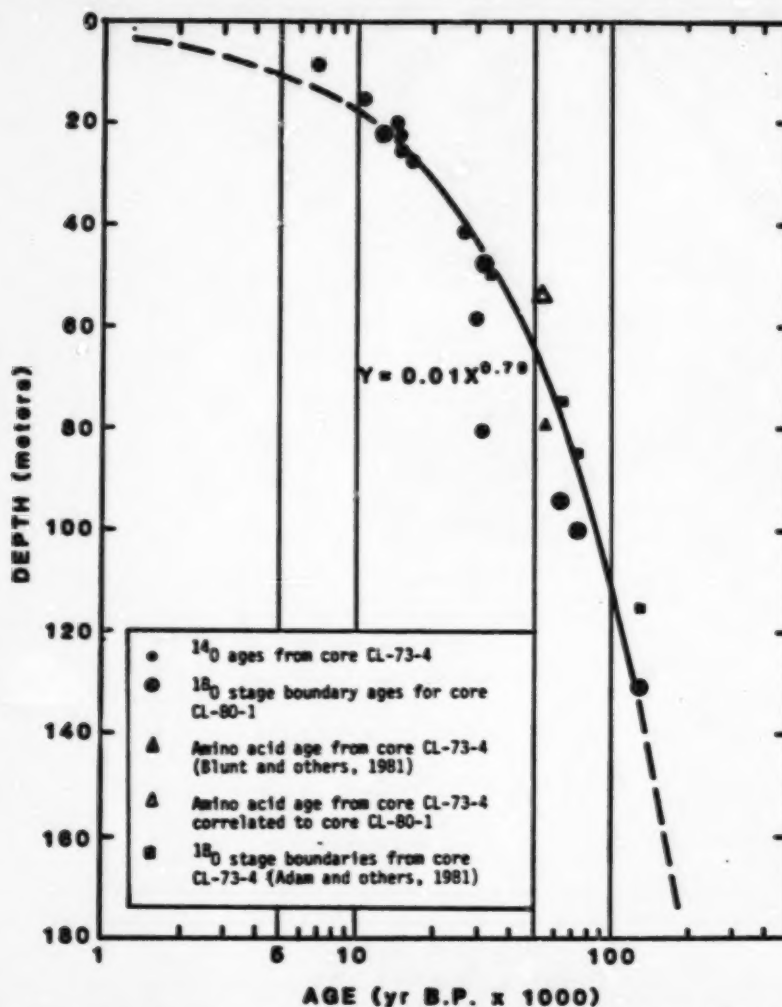


Figure 5. Age-depth relations in core CL-80-1 and other cores from Clear Lake. Regression line $Y = 0.01 X^{0.79}$ is drawn for core CL-80-1 data points only. All other data are for comparison purposes. Two radiocarbon dates from core CL-73-4, at 58 and 80 m depth, do not fall in a rational sequence with other radiocarbon dates from that core and are suspect (Sims and others, 1981). ^{18}O -stage boundaries for core CL-73-4 were determined from palynological analysis (Sims and others, 1981; Adam and others, 1981) and those for core CL-80-1 were estimated from preliminary correlations with core CL-73-4 (L. E. Heusser, written commun., 1981).

and Sims, 1981; and Adam and others, 1981). The younger pollen zones in core CL-73-4 are dated by radiocarbon methods (Sims, 1976; Sims, Adam, and Rymer, 1981), and the older zones are dated by amino acid racemization techniques (Blunt and others, 1981). These dates calibrate the pollen data, in particular the raw oak-pollen frequency curve that is correlated with the ^{180} curves from deep-sea cores (fig. 5).

Physical properties of the sediments in core CL-80-1 have also been determined and correlated with pollen analyses and stages (Sims, Rymer, and Perkins, 1981). In core CL-80-1 high water and organic carbon contents are found from 0 to 23 m and high water, organic carbon, and inorganic carbon contents are found from 125 to 130 m (Sims, Rymer, and Perkins, 1981). These two parts of the core correspond with zones of high oak pollen frequency which are correlative with ^{180} stages 1 and 5e (Heusser and Sims, 1981; Sims, Rymer, and Perkins, 1981). Analysis of organic and inorganic carbon contents in core CL-80-2 shows that high values occur from 110 to 122 m (fig. 3). The similarity of depth and thickness of these zones of high organic and inorganic carbon contents suggests that the interval 110-122 m in core CL-80-2 corresponds with the similar zone in core CL-80-1 and with a zone of high oak pollen, which is correlated to ^{180} stage 5e (Heusser and Sims, 1981). All this places a tentative age of 130,000 years for the base of the interval. The depth of the zone of high organic and inorganic carbon contents correlates well in cores CL-80-1 and CL-80-2, and pollen zones are well correlated between cores CL-73-4 and CL-80-1; therefore, sedimentation rates are inferred to be similar in these cores, and within the west basin of Clear Lake as a whole. By assuming a sedimentation rate for CL-80-2 similar to those of CL-80-1 and CL-73-4 a tentative age estimate for the bottom of core CL-80-2 is about 175,000 to 200,000 years (fig. 5). Confirmation of this speculation awaits pollen analysis of core CL-80-2.

SUMMARY

Core CL-80-2 consists of two cored sediment intervals: 53.4 to 78.2 m and 98.7 to 165.8 m below lake bottom (fig. 2). Both intervals are composed primarily of clayey and silty sapropelic mud similar to that presently being deposited in Clear Lake. Twenty-three ash beds are also present in the core (table 3), but these are thin (3.3 cm average thickness) and comprise only 1.3 percent of the recovered section. The age of sediment at the bottom of core CL-80-2 can not be determined directly, rather an inferred age of 175,000 to 200,000 years is given by correlating sediment properties with nearby well-dated cores in the same basin of Clear Lake.

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APPENDIX A

GRAPHIC NOTATIONS USED IN CORE DESCRIPTIONS

Core descriptions of 1-m-long parts of each segment are shown on individual sheets. Graphic notations used in the core descriptions and radiographic interpretations are modified from Bouma (1962). The conventions and symbols used follow:

Lithology

The lithologic descriptions are given in words rather than symbols such as used by Bouma (1962), because so few lithologic variants occur. The letter "V" denotes the presence of vivianite. Symbols marked by "*" are also used to describe features cited in the Radiographic column (see below).

Bedding Plane Type*

-  Sharp flat contact
-  Distinct flat contact
-  Transition (range of transition <0.5 cm)
-  Gradual transition (range of transition 0.5-1.0 cm)
-  Hardly visible gradual transition (range of transition >1.0 cm)
-  Undulating contact, gradations as above
-  Irregular contact, gradations as above

Structure

-  Graded bedding*
-  Load cast*
-  Cross bedding*
-  Interval in which structure occurs*
-  Indistinct structure (a modifier to a structure symbol)*

Layer Properties

Parallel lamination (<0.5 cm thick)*:

-  Coarse laminae predominate
-  Fine laminae predominate
-  Coarse and fine laminae in about equal frequency

Disturbed parallel lamination (coarse and fine modifiers above apply)



Slightly disturbed



Strongly disturbed



Parallel wavy lamination*:
(Predominating thickness and degree of disturbance as noted above)



Lenticular wavy Lamination*:
(Predominating thickness and degree of disturbance as noted above)



Interval in which a property occurs*:



Indistinct property*:



Very indistinct property*:

Color

Color designations are taken from the Munsell Soil Color Chart (Munsell Products, 1973). The conventions used in depicting the relationships between different colors in a segment are as follows:

10Y 5/4
5YR 2/3

Distinct color break between two units.

Fossils



Fish scale*



Fish bone*



Gastropod*



Clam*



Wood fragment oriented parallel to bedding plane



Wood fragment not oriented parallel to bedding plane



Plant fragment oriented parallel to bedding plane



Plant fragment not oriented parallel to bedding plane



Leaf or leaf fragment

Photograph Number

Numbers in this column refer to the index number assigned serially to both the color and black-and-white photos taken of the cut surface of the core segment. Example: 1-1 refers to segment one, photo one. There are four photos for each meter of core. Each photo covers approximately 30 cm of segment length with 2 to 3 cm of overlap with adjacent photos. These photos

may be examined, and copies may be made at the requestor's expense by contacting:

John D. Sims
Branch of Earthquake Tectonics and Risk Analysis
U.S. Geological Survey, MS-77
345 Middlefield Road
Menlo Park, CA 94025.

Radiographic

This column contains supplementary information derived from the analysis of X-ray radiographs of 8-mm-thick slices of each core segment. The radiographs are negative images so that high film density means high X-ray transparency of the material and the contrary for low film density. The notations used in this column are a combination of those marked by "*" under the headings Bedding Plane Type, Structure, Layer Properties, and Fossils, plus some additional symbols not shown under these headings, which include:

GRANULE: An X-ray opaque body <1 mm in diameter.

GRANULE CLUSTER: an irregularly to regularly shaped mass or cluster of granules.

PEBBLE: A large (>3 mm) opaque body.

MOTTILING: Irregularly shaped areas of low X-ray film density of unknown origin.

BIOTURBATION: Disruption of the sediment caused by the activities of animals (foraging, living, burrowing, nesting etc.). The degree of sediment disturbance is also generally noted (slight, moderate, heavy).

Δ: A difference in emulsion density on the radiograph between stratigraphic subunits owing to ease of transmission of the X-rays to the film. The transmission characteristics of the sediments are due to compositional, grain size, or other physiochemical variations in the deposits. This symbol is accompanied by a plus (+) or minus (-) sign to indicate the direction of the density change. Plus indicates change from less dense to more dense emulsion, and minus indicates the reverse.

FRACTURED: Physical breaking of the indicated portion of the segment or radiographed slice. Most such breaks occurred when preparing the slice of the core segment for radiography.

UXO: Unidentified X-ray Opaque object. Estimates of the origin of the object are commonly suggested.

GAS BUBBLES: Circular to irregular areas of low sediment density caused by expanding gas trapped in the sediment. Most common in the more water-saturated and less-cohesive sediments.

DEBRIS: Material that has been scraped from the core hole wall, caved in and fallen down the hole, or that fell from the core barrel during retrieval of the previous segment.

GAP: A minor portion of a segment that is missing.

VEINLETS: X-ray opaque structures that have the form of delicate veinlets.

X-ray radiographs were made on 11 x 17 in (28 x 43 cm) Kodak AA Industrial X-ray film. Each sheet of film accommodates four pieces of a core segment each up to 40 cm long. Two sheets of X-ray film are required for a 3.05-m-long segment of core. The boundaries between pieces of a segment and

between the two sheets of film where required is noted in the radiographic column as below:

I
II

Marks the boundary between individual slices on the radiograph.

film 1, IV
film 2, I

Marks the boundary between the two films required to radiograph an entire core segment 3.05 m long. Roman numeral refer to the boundary between individual slices of core segment.

Sample Number

Two types of sample numbers are used to identify samples taken for specific tests, analyses, or supplementary data. All samples except those taken for "special" analyses have four-digit numbers without a letter prefix. Three-digit numbers preceded by an "S" refer to samples taken for "special" analyses. Analyses and their sample intervals are discussed in Appendix B.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 1 DEPTH _____ to _____ cm

DESCRIBED BY LAF and JDS DATES JAN 18 1981 and MAR 2 1981 SHEET 1 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
Debris		5Y 4/2 (2.5Y 4/0)					
10					1-1		
20							
30							
40					1-2		
50							
60							
70					1-3		
80							
90					1-4		
100							

NO RADIOGRAPH

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 1 DEPTH 5342 to 5367 cm

DESCRIBED BY LAF and JDS DATES JUL 8 1981 and JUL 2 1981 SHEET 2 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0 Debris		5Y 4/2 (2.5Y 4/0)					
10					1-5	110 DEBRIS	
20						120	
30						130	
40					1-6	140 NO RADIOGRAPH	
50						150	
60					1-7	160	
70						170	
80						180 $\frac{I}{II}$	
90					1-8	190 DRILLING DISTURBANCE	
100						200	

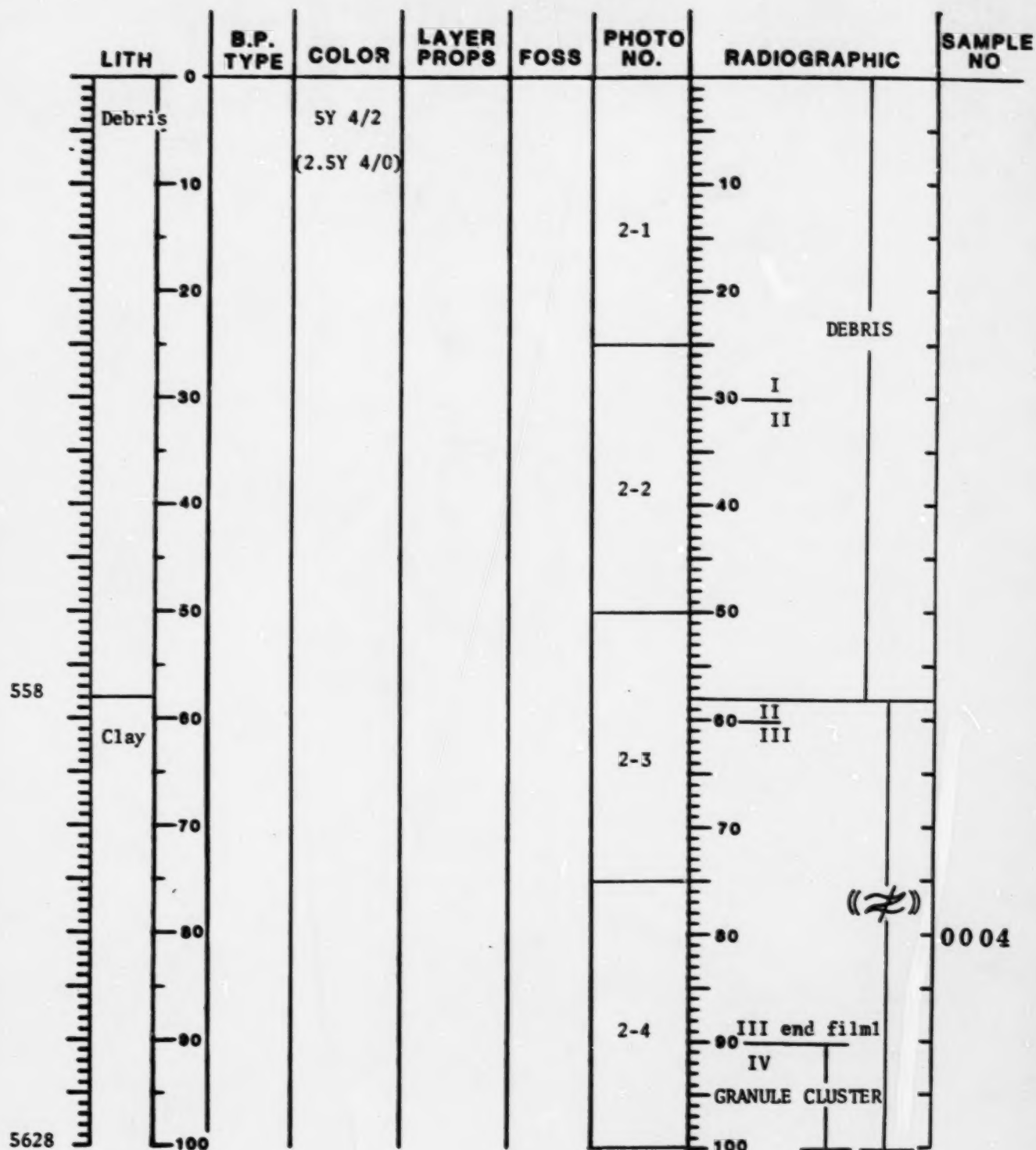
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 1 DEPTH 5367 to 5462 cm

DESCRIBED BY LAF and JDS DATES JAN 8 1981 and MAR 2 1981 SHEET 3 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
Debris		5Y 4/2					
		(2.5Y 4/0)					
10						210	
5367					1-9	DRILLING DISTURBANCE	
Clay						220 $\frac{II}{III}$ end film 1	
20							
30						230	
40					1-10	240	0001
50						250	
60						260 $\frac{III}{IV}$	
70					1-11	270	0002
80						280 $\frac{-\Delta\delta}{+ \Delta\delta}$ ash? MASSIVE	
90					1-12	290	0003
5462						300	
100							

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 2 DEPTH 5586 to 5628 cm

DESCRIBED BY LAF and JDS DATES JAN 9 1961 and JAN 10 1961 SHEET 1 of 3



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 2 DEPTH 5628 to 5728 cm

DESCRIBED BY LAF and JDS DATES Jan 9 1981 and Jan 9 1981 SHEET 2 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
5628	0							
	Clay		5Y 4/2					0005
			(2.5Y 4/0)					
	10					2-5	110	
	20						120 IV V	
	30						130	0006
	40					2-6	140	
	50						150 V VI	
	60						160	0007
	70					2-7	170	
	80						180 VI end film 2 VII	0008
	90					2-8	190	
5728	100						200	

SLIGHTLY DISTURBED, INDISTINCT, LENTICULAR WAVY LAMINATIONS THROUGHOUT

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 2 DEPTH 5728 to 5757 cm

DESCRIBED BY LAF and JDS DATES JAN 9 1961 and JAN 2 1961 SHEET 3 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
5728	0		5Y 4/2					
	Clay		(2.5Y 4/0)					0009
	10					2-9	210 VII VIII	
	20						220	
						2-10		
5757	30						230 end film 3	
	40						240	
	50						250	
	60						260	
	70						270	
	80						280	
	90						290	
	100						300	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 3 DEPTH _____ to _____ cm

DESCRIBED BY LAF and JDS DATES JUL 1 & 2, 1961 and AUG 2, 1961 SHEET 1 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0 Debris		5Y 4/2					
10		(2.5Y 4/0)			3-1		
20							
30							
40					3-2		
50							
60							
70					3-3		
80							
90					3-4		
100							

NO RADIOGRAPH

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 3 DEPTH 5890 to 5895 cm

DESCRIBED BY LAF and JDS DATES JAN 16 '68 and SHEET 2 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0 Debris		SY 4/2					
10		(2.5Y 4/0)			3-5		
20							
30							
40					3-6		
50						NO RADIOGRAPH	
60							
70					3-7		
80							
90					3-8		
5890 Clay							
5895						MASSIVE	0010
100						200	

GRANULES THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 3 DEPTH 5895 to 5993 cm

DESCRIBED BY LAF and JDS DATES JAN 16 1981 and MAR 2 1981 SHEET 3 of 3

5895	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	Clay		5Y 4/2 (2.5Y 4/0)					
						3-9	210	
							220	
							MASSIVE	0011
							230 I II	
						3-10	240	
								0012
							250	
							260	
						3-11	II III	
							270	
							(~~280~~)	0013
							280	
	Debris					3-12	NO RADIOGRAPH	
							290	
5993								
							300	

DESCRIBED BY LAF and JDS DATES JAN 15 1991 and MAY 2 1991 SHEET 1 of 3

28

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 4 DEPTH 6202 to 6302 cm

DESCRIBED BY LAF and JDS DATES JAN 15 1981 and MAR 2 1981 SHEET 2 of 3

6202	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	Clay		5Y 4/2 (2.5Y 4/0)				DRILLING DISTURBANCE	0014
						4-5	110	
							120	
							130	0015
						4-6	140	
							150	
	V						NO RADIOGRAPH	
						4-7	160	
							170	
							180	0016
						4-8	190	
							200	
6302								

GRANULES THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 4 DEPTH 6302 to 6366 cm

DESCRIBED BY LAF and JDS DATES JAN 18 1961 and MAR 2 1961 SHEET 3 of 3

6302	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	Clay		5Y 4/2					
			(2.5Y 4/0)					0017
						4-9	210	
							220	
							MASSIVE	
							230 IV end film 2	
							V	0018
						4-10	240	
	V						250	
	Debris					4-11	NO RADIOGRAPH	
							260	
6366								
							270	
							280	
							290	
							300	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 5 DEPTH 6500 to 6521 cm

DESCRIBED BY LAF and JDS DATES JAN 1961 and MAR 2 1961 SHEET 1 of 2

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
Debris		5Y 4/2					
10		(2.5Y 4/0)			5-1		
20							
30							
40					5-2		
50							
60					5-3		
70							
80							
6500							
90					5-4		
						DRILLING DISTURBANCE	
						((Z))	0019
6521							
Clay							
100							

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 5 DEPTH 6521 to 6565 cm

DESCRIBED BY LAF and JDS DATES JAN 19 1981 and MAR 2 1981 SHEET 2 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
6521	Clay		5Y 4/2 (2.5Y 4/0)					
						5-5	110 I II	
							120	0020
							(7)	
							130	
						5-6	140	
6565	Debris							
							150 end of film	
							160	
							170	
							180	
							190	
							200	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 6 DEPTH 6805 to 6905 cm

DESCRIBED BY LAF and JDS DATES JAN 22 1981 and MAR 2 1981 SHEET 1 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
6805	0		5Y 4/2					0021
	Clay		(2.5Y 4/0)					
	10					6-1		
	20							
	30						I II	0022
	40					6-2		
	50							0023
	60						II III	
	70					6-3		0024
	80							
	90					6-4	III IV	
6905	100							0025

BARELY VISIBLE LENTICULAR WAVY LAMINATIONS THROUGHOUT.
VIVIANITE(?) VEINLETS THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 6 DEPTH 6905 to 6985 cm

DESCRIBED BY LAF and JDS DATES JAN 20 1981 and MAR 2 1981 SHEET 2 of 2

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
6905	0						
Clay		5Y 4/2					
	10	(2.5Y 4/0)					
	20				6-5	110	
	30					120 $\frac{IV}{V}$	0026
	40				6-6	130	
	50					140	
	60					150 $\frac{V}{VI}$	0027
	70				6-7	160	
	80					170	
	90				6-8	180 end film 2	
6985	100					190	
						200	

VIVIANITE(?) VEINLETS THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 7 DEPTH 7110 to 7210 cm

DESCRIBED BY LAF and JDS DATES Jan 22 1961 and MAR 2 1961 SHEET 1 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
7110	0							
	Clay		5Y 4/2					
	V		(2.5Y 4/0)					
	10					7-1		
	20							0028
	30						I II	
	40					7-2		
	50							0029
	60							
	70					7-3	II III	
	80							0030
	90					7-4		
7210	100							0031

VIVIANITE(?) VEINLETS THROUGHOUT.
MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 7 DEPTH 7210 to 7310 cm

DESCRIBED BY LAF and JDS DATES JAN 25 1961 and MAR 2 1961 SHEET 2 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
7210	0						III MASSIVE	
	Clay		5Y 4/2				IV	
			(2.5Y 4/0)				110	
	10					7-5	120	0032
	20						130	
	30						IV	
	40					7-6	140 V	0033
	50						150	
	60						160	
	70					7-7	170	
							V	0034
							VI	
	80						180	
	90					7-8	190	
							MASSIVE	0035
7310	100						200	

VIVIANITE(?) VEINLETS THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 7 DEPTH 7310 to 7389 cm

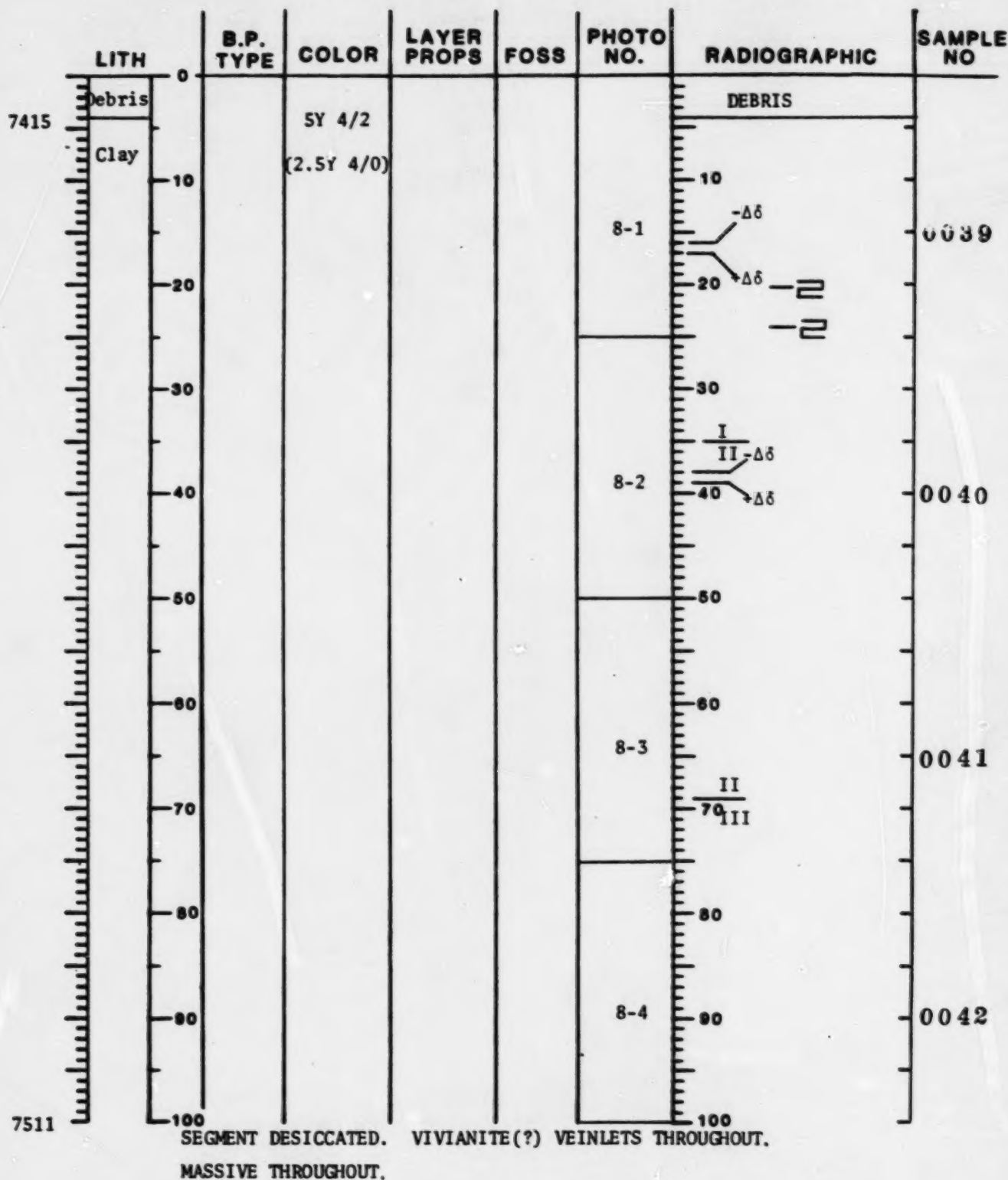
DESCRIBED BY LAF and JDS DATES JAN 25 1981 and MAR 2 1981 SHEET 3 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
7310	0					VI	
Clay		5Y 4/2				VII	
	10	(2.5Y 4/0)			7-9	210	
	20					220	0036
	30					230	
	40				7-10	VII VIII 240	
	50					250	0037
	60				7-11	260	
V	70					270 VIII IX	0038
	80				7-12	280	
7400	90					290	
	100					300	

VIVIANITE(?) VEINLETS THROUGHOUT.
MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 8 DEPTH 7415 to 7511 cm

DESCRIBED BY LAF and JDS DATES JAN 29 1981 and FEB 2 1981 SHEET 1 of 3



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 8 DEPTH 7511 to 7611 cm

DESCRIBED BY LAF and JDS DATES JAN 22 1981 and MAR 2 1981 SHEET 2 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
7511	0					III IV	
Clay		5Y 4/2 (2.5Y 4/0)			8-5	110	0043
	10					120	
	20					130	
	30					IV V	
	40				8-6	140	0044
	50					150	
	60					160	
	70				8-7	170 V VI	0045
V	80					180	
	90				8-8	MOTTLED 190	0046
7611	100					200	

MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 8 DEPTH 7611 to 7645 cm

DESCRIBED BY LAF and JDS DATES JAN 23 1981 and MAR 2 1981 SHEET 3 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC		SAMPLE NO
7611	0	5Y 4/2				VI	MASSIVE	
		(2.5Y 4/0)				VII		
	10				8-9	210		
						MOTTLED		0047
	20					220		
							≠	
	30				8-10	230		
7645	V					end film 3, VII		
	40					240		
	50					250		
	60					260		
	70					270		
	80					280		
	90					290		
	100					300		

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 9 DEPTH 9868 to 9923 cm

DESCRIBED BY LAF and IDS DATES JAN 30 1981 and MAR 2 1981 SHEET 1 of 3

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
Debris		5Y 4/2					
10		(2.5Y 4/0)			9-1		
20							
30							
40					9-2		
9868							
Clay							
50						MASSIVE	0048
60					9-3		
70							
80							
90					9-4		
9923							
V							
100							

BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 9 DEPTH 9923 to 10023 cm

DESCRIBED BY LAF and JDS DATES JAN 30 1981 and MAR 2 1981 SHEET 2 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
9923	0							0050
	Clay		5Y 4/2 (2.5Y 4/0)					
	10					9-5	110 II III	
	20						120	
	30							0051
	40					9-6	140	
	50						150 III IV	
	60					9-7	160	0052
	70						170	
	80						180 IV V	0053
	90					9-8	190	
10023	100						200	

BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 9 DEPTH 10023 to 10113 cm

DESCRIBED BY LAF and JDS DATES JAN 30 1981 and MAR 2 1981 SHEET 3 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10023	0							0054
	Clay		5Y 4/2 (2.5Y 4/0)					
	10					9-9	210 V 220VI	
	20							
	30						230	0055
	40					9-10	240	
	50				α?		250 VI VII	0056
	60					9-11	260	
	70						270	
	80							0057
	90					9-12	280	
10113	90						290	
	100						300	

MASSIVE AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 10 DEPTH 10173 to 10273 cm

DESCRIBED BY LAF and JDS DATES FEB 6 1981 and MAR 2 1981 SHEET 1 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10173	0						Debris	
	Clay		5Y 4/2					
			(2.5Y 4/0)					
	10					10-1		0058
	Debris						FRACTURED	
	20							
	Clay							
	30						I	
							II	
	40					10-2		0059
	50							
	60					10-3		
					?		II	
	70						III	0060
	80							
	90					10-4		
10273	100							0061

VIVIANITE? VEINLETS AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 10 DEPTH 10273 to 10373 cm

DESCRIBED BY LAF and JDS DATES FEB 6 1981 and MAR 2 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10273	0							
	Clay		5Y 4/2 (2.5Y 4/0)				III IV	
	10					10-5	110	
	20						120	0062
	30						130	
	40					10-6	140 IV V	0063
	50						150	
	60					10-7	160	
	70						170	0064
	80						V VI	
							-Δδ +Δδ ash?	
	90					10-8	180	
	100						190	0065
10373							200	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 10 DEPTH 10373 to 10473 cm

DESCRIBED BY LAF and JDS DATES FEB 8 1981 and MAR 2 1981 SHEET 3 of 4

10373	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	Clay		5Y 4/2 (2.5Y 4/0)		α?			
						10-9	210 $\frac{VI}{VII}$	
							220	0066
							230	
						10-10	240	
							$\frac{VII}{VIII}$	0067
							250	
							260	
						10-11	270	0068
							$\frac{VIII}{IX}$	
							280	
						10-12	290	
							300	0069
10473								

MASSIVE THROUGHOUT. A SECTION FROM 205cm - 309cm IS DESSICATED.

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 10 DEPTH 10473 to 10482 cm
DESCRIBED BY LAF and JDS DATES FEB 6 1961 and MAR 8 1961 SHEET 4 of 4

LITH		B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10473	0		5Y 4/2			10-13	MASSIVE	
10482	10		2.5Y 4/0)				310	
	20							
	30							
	40							
	50							
	60							
	70							
	80							
	90							
	100							

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 11 DEPTH 10478 to 10578 cm

DESCRIBED BY LAF and JDS DATES FEB 12 1991 and MAR 2 1991 SHEET 1 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10478	0							
	Clay		5Y 4/2					
	10		(2.5Y 4/0)			11-1	10	0070
	20						20	
	30						30 I II	0071
	40				-	11-2	40 - $\Delta\delta$ ash? + $\Delta\delta$	
	50						50	
	60						60 II III	0072
	70					11-3	70	
	80						80	
	90					11-4	90 III IV end film 1	0073
10578	100						100	

STRONGLY BIOTURBATED THROUGHOUT.

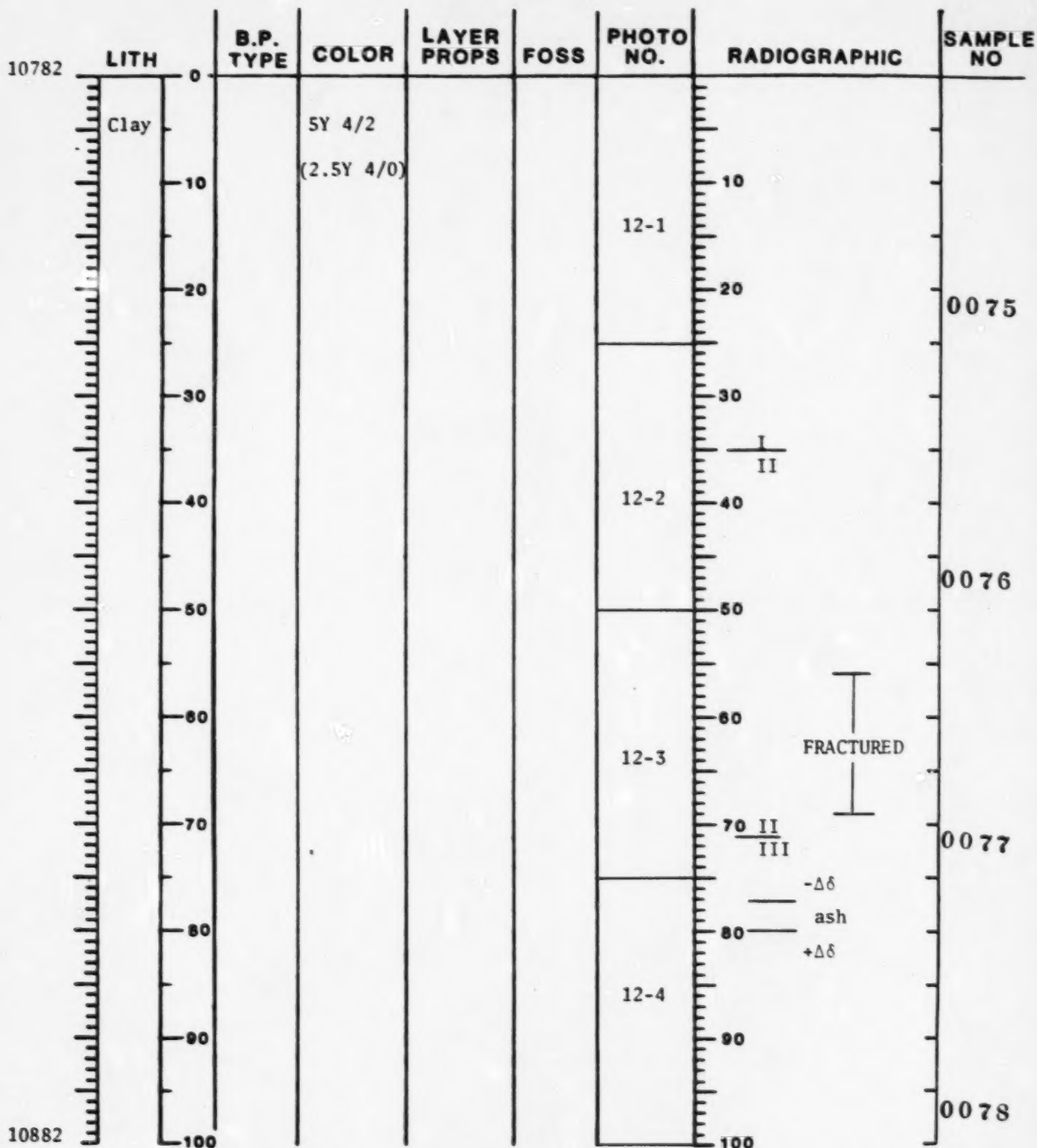
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 11 DEPTH 10578 to 10591 cm

DESCRIBED BY LAF and DATES FEB 12 1961 and MAR 2 1961 SHEET 2 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10578	0		5Y 4/2				-Δδ	
	Clay		(2.5Y 4/0)			11-5	ash	
							+Δδ	
	10						110	0074
10591							end film 2	
	20						120	
	30						130	
	40						140	
	50						150	
	60						160	
	70						170	
	80						180	
	90						190	
	100						200	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 12 DEPTH 10782 to 10882 cm

DESCRIBED BY LAF and JDS DATES FEB 12 1981 and MAR 2 1981 SHEET 1 of 4



MASSIVE AND STRONGLY BIOTURBATED THROUGHOUT. SEGMENT FRACTURED AND DESSICATED BETWEEN 0 - 81cm AND 161cm - 304cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 12 DEPTH 10882 to 10982 cm

DESCRIBED BY LAF and JDS DATES FEB 12 1981 and MAR 2 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10882	0		5Y 4/2				III IV	
	Clay		(2.5Y 4/0)					
	10					12-5	110	
	20						120	0079
	30						130	
	40					12-6	140 IV V	0080
	50						150	
	60					12-7	160	
	70						170	0081
	80						V VI	
	90					12-8	180	
	100						190	0082
10982							200	

MASSIVE AND STRONGLY BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 12 DEPTH 10982 to 11082 cm

DESCRIBED BY LAF and JDS DATES FEB 12 1981 and MAR 2 1981 SHEET 3 of 4

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
10982	0						
Clay		5Y 4/2					
	10	(2.5Y 4/0)			12-9	210 $\frac{VI}{VII}$	
	20					220	S001
	30					230	
	40				12-10	240	
	50					$\frac{VII}{VIII}$	0084
	60					250	
	70				12-11	260	
	80					270	0085
	90					$\frac{VIII}{IX}$	
	100				12-12	280	
						290	
11082						300	0086

MASSIVE THROUGHOUT.

DESCRIBED BY LAF and JDS DATES ~~FEB 12 1981~~ and MAR 2 1981 SHEET 4 of 4

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LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 13 DEPTH 11087 to 11187 cm

DESCRIBED BY LAF and JDS DATES FEB 13 1981 and MAR 2 1981 SHEET 1 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11087	Clay		5Y 4/2				DRILLING DISTURBANCE	
			(2.5Y 4/0)			13-1		0087
						13-2	MASSIVE/W VIVIANITE VEINLETS AND BIOTURBATION	0088
						13-3	II end film 1 III	0089
						13-4	III IV	0090
11187								

SEGMENT SLIGHTLY DESSICATED THROUGHOUT. NO RADIOGRAPHY BETWEEN 127cm - 172cm DO TO SPLITTING DIFFICULTIES.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 13 DEPTH 11187 to 11259 cm

DESCRIBED BY LAF and JDS DATES SEP 13 1961 and MAR 2 1961 SHEET 2 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11187	0		5Y 4/2					
	Clay		(2.5Y 4/0)					
	10					13-5	110 MASSIVE	0091
	20						120	
	30						130	
	40					13-6	140	0092
	50						NO RADIOGRAPH	
	60						150	
	70					13-7	160	
11259	70						170	0093
	80						180	
	90						190	
	100						200	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 14 DEPTH 11392 to 11489 cm

DESCRIBED BY LAF and JDS DATES FEB 16 1981 and MAR 2 1981 SHEET 1 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11392	Debris							
	Clay		5Y 4/2					
			(2.5Y 4/0)					
						14-1		
								0094
						14-2		
								0095
						14-3		
								0096
								S002
						14-4		
11489								0097

MASSIVE WITH VIVIANITE VEINLETS AND BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 14 DEPTH 11489 to 11589 cm

DESCRIBED BY LAF and JDS DATES FEB 12 1961 and MAR 2 1961 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11489	0						III	
	Clay		5Y 4/2				IV	
			(2.5Y 4/0)					
	10					14-5	110	
	20						120	
	30						130	0098
	40					14-6	IV V 140	
	50						150	0099
	60					14-7	160	
	70						170 V VI	0100
	80						180	
	90					14-8	190	
11589	100						200	0101

MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 14 DEPTH 11589 to 11689 cm

DESCRIBED BY LAF and JDS DATES FEB 16 1981 and MAR 2 1981 SHEET 3 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11589	0		5Y 4/2				VI	
			(2.5Y 4/0)				VII	
	10					14-9	210	
	20						220	
	30						230	0102
	40					14-10	240 VII	
							VIII	
	50						250	0103
	60						260	
	70					14-11	270	
	80						VIII	0104
							IX	
	90					14-12	280	
							290	
11689	100						300	0105

MASSIVE AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 14 DEPTH 11689 to 11695 cm

DESCRIBED BY LAF and JDS DATES FEB 18 1961 and MAR 2 1961 SHEET 4 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11689	0		5Y 4/2			14-13		
11695	Clay		(2.5Y 4/0)					
	10						310	
	20							
	30							
	40							
	50							
	60							
	70							
	80							
	90							
	100							

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 15 DEPTH 11697 to 11796 cm

DESCRIBED BY LAF and JDS DATES FEB 19 1981 and MAR 2 1981 SHEET 1 of 1

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
11697	0							
	Clay		5Y 4/2 (2.5Y 4/0)					
	10					15-1		
	20							
	30							
	40					15-2		
	50						NO RADIOGRAPH	
	60							
	70					15-3		
	80							
	90					15-4	MASSIVE	0106
	100						NO RADIOGRAPH	
11796								

SEGMENT DESSICATED EXCEPT INTERVAL BETWEEN 81cm - 94cm. UNABLE TO SPLIT OR SUBSAMPLE MOST OF THE SEGMENT DO TO DESSICATION.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 16 DEPTH 12002 to 12102 cm

DESCRIBED BY LAF and JDS DATES FEB 18 1981 and MAR 2 1981 SHEET 1 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12002	0							
	Clay		5Y 4/2					
			(2.5Y 4/0)					
	10					16-1		0107
	20							
	30							
	40					16-2	I II	0108
	50							
	60					16-3		0109
	70						70 II III	
	80							
	90					16-4	-Δδ ash? +Δδ	S003 0110
12102	100							

MASSIVE AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 16 DEPTH 12102 to 12202 cm

DESCRIBED BY LAF and JDS DATES FEB 11 1981 and MAR 2 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRA. HIC	SAMPLE NO
12102	0							
	Clay		5Y 4/2					
			(2.5Y 4/0)					
	10					16-5	III IV 110	0111
	20						MASSIVE AND BIOTURBATED	
	30							
	40					16-6	140IV V	0112
	50							
	60							
	70					16-7		0113
	80						V VI FRACTURED	
	90					16-8	MASSIVE AND BIOTURBATED	0114
12202	100							

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 16 DEPTH 12202 to 12302 cm

DESCRIBED BY LAF and JDS DATES FEB 1, 1981 and MAR 2, 1981 SHEET 3 of 4

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12202	0						
Clay		5Y 4/2				VI	
		(2.5Y 4/0)				VII	
	10				16-9	210	0115
	20					220	
	30					230	
	40				16-10	240 VII	0116
						VIII	
	50					250	
	60				16-11	260	0117
	70					270	
	80					VII	
						IX	
	90				16-12	280	0118
						290	
12302	100					300	

MASSIVE AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 16 DEPTH 12302 to 12309 cm

DESCRIBED BY LAE and JDS DATES FEB 19 1961 and MAR 2 1961 SHEET 4 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12302	Clay	0	5Y 4/2			16-13	MASSIVE	
12309			(2.5Y 4/0)					
		10					310	
		20						
		30						
		40						
		50						
		60						
		70						
		80						
		90						
		100						

DESCRIBED BY LAF and JDS DATES FEB 26 1981 and MAY 2 1981 SHEET 1 of 3

SEGMENT HIGHLY FRACTURED BETWEEN 155cm - 182cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 17 DEPTH 12508 to 12582 cm

DESCRIBED BY LAF and JDS DATES FEB 28 1981 and MAY 2 1981 SHEET 3 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12508	0							
	Clay		5Y 4/2					
	V		(2.5Y 4/0)					
	10					17-9	210 VI VII	0127
	20						220	
	30						230	
	40					17-10	240	0128
	V							
	V							
	50						250 VII VIII	
	60						260	
	70					17-11	270	0129
12582								
	80						280	
	90						290	
	100						300	

MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 18 DEPTH 12613 to 12710 cm

DESCRIBED BY LAF and JDS DATES MAR 2 1961 and APR 2 1961 SHEET 1 of 4

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12613	0						
Debris		5Y 4/2					
Clay		(2.5Y 5/1)				NO RADIOGRAPH	
	10				18-1		
	20						
	30				18-2		0130
	40					MASSIVE	
	50				18-3		0131
	60						
	70				18-4		
	80					NO RADIOGRAPH	
	90	5Y 5/2			18-5		
Silty Clay							
12710	100	5Y 6/2					

PORTIONS OF THE SEGMENT SLIGHTLY DESSICATED. FRACTURING OCCURRED WHEN SEGMENT WAS SPLIT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 18 DEPTH 12710 to 12810 cm

DESCRIBED BY LAF and JDS DATES MAR 2 1961 and MAR 2 1961 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12710	0							
	Silty Clay		5Y 6/2					
	10							
						18-6	NO RADIOGRAPH	
	20		5Y 4/2					
								
	30						130 II	
	Clay						thin radiograph	
	40					18-7	140	
	50						150	
	60						II	
							NO RADIOGRAPH	
	70					18-8	III	0132
							170	
							MASSIVE	
	80						III	
							180 IV	
	90					18-9	190	0133
12710	100						200	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 18 DEPTH 12810 to 12910 cm

DESCRIBED BY LAF and IDS DATES MAR 2 1961 and MAR 2 1961 SHEET 3 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12810	0							
	Clay		5Y 4/2					
	10					18-10	IV 210 V MASSIVE	0134
	20						220	
	30						230	
							FRACTURED	
	40					18-11	V 240 VI	0135
	50						250	
							MASSIVE	
	60						260	
						18-12		0136
	70						270 VI	
							VII	
	80						MASSIVE with GRANULES	
						18-13	280	
	90						290	0137
						18-14		
12910	100						300	

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 18 DEPTH 12910 to 12915 cm

DESCRIBED BY LAF and JDS DATES MAR 2 1981 and MAR 2 1981 SHEET 4 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12910	Clay	0	5Y 4/2				MASSIVE /w GRANULES	
12915								
		10					310	
		20						
		30						
		40						
		50						
		60						
		70						
		80						
		90						
		100						

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 19 DEPTH 12918 to 13006 cm

DESCRIBED BY LAF and JDS DATES MAR 2 1981 and M/P 2 1981 SHEET 1 of 1

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
12918	0		5Y 4/2					
	Clay		(2.5Y 4/0)					
	10					19-1	MASSIVE with GRANULES	0138
	20							
	30						I II	
	40					19-2		0139
	50							
	60						II III	
	70					19-3		0140
	80							
	90					19-4		
13006	100							

SILTY CLAY LAMINATIONS @ 3.5, 5, 8-8.5, 9.5-10, 12, 19.5, 27, 34, 44, 50, 58, 64, 72, 78, 81cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 20 DEPTH 13223 to 13323 cm

DESCRIBED BY LAF and JDS DATES MAR 3 1981 and MAR 3 1981 SHEET 1 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13223	0						NO RADIOGRAPH	
	Clay		5Y 4/2 (2.5Y 5/1)					
	10					20-1	10 MASSIVE with GRANULES	0141
	20						20	
	30						30	
	40					20-2	I II FRACTURED	
	50						50	
	60					20-3	60 MASSIVE with VIVIANITE VEINLETS	0142
	70						70 II III	
	80						80	0143
	90					20-4	90 MASSIVE with GRANULES	
13323	100						100	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 20 DEPTH 13323 to 13423 cm

DESCRIBED BY LAF and JDS DATES MAR 3 1931 and MAR 3 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13323	0		5Y 4/2				III IV	0144
	10		(2.5Y 5/1)			20-5	110 MASSIVE with GRANULES	
	20						120	
	30						130	0145
	40					20-6	140 IV V	
	50						150 (Z)	
	60							0146
	70					20-7	160	
	80						170	
	90						V VI	
	100			Fractured	0	20-8	180	0147
13423	100						200	

FROM 75cm - 305cm VERTICAL FRACTURING IS PRESENT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 20 DEPTH 13423 to 13523 cm

DESCRIBED BY LAF and JDS DATES MAR 3 1981 and MAR 3 1981 SHEET 3 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13423	0		5Y 4/2					
	Clay		(2.5Y 5/1)					0148
	10			Fractured		20-9	210 VI VII	
	20						220	
	30						230	0149
	40					20-10	240 -Δδ ash? VII +Δδ VIII	
	50						250	
	60						260	0150
	70					20-11	270	
	80						VIII IX	
	90					20-12	280	0151
13523	100						290 300	

INDISTINCT SLIGHTLY DISTURBED LENTICULAR WAVY LAMINATION THROUGHOUT.
GRANULES THROUGHOUT.

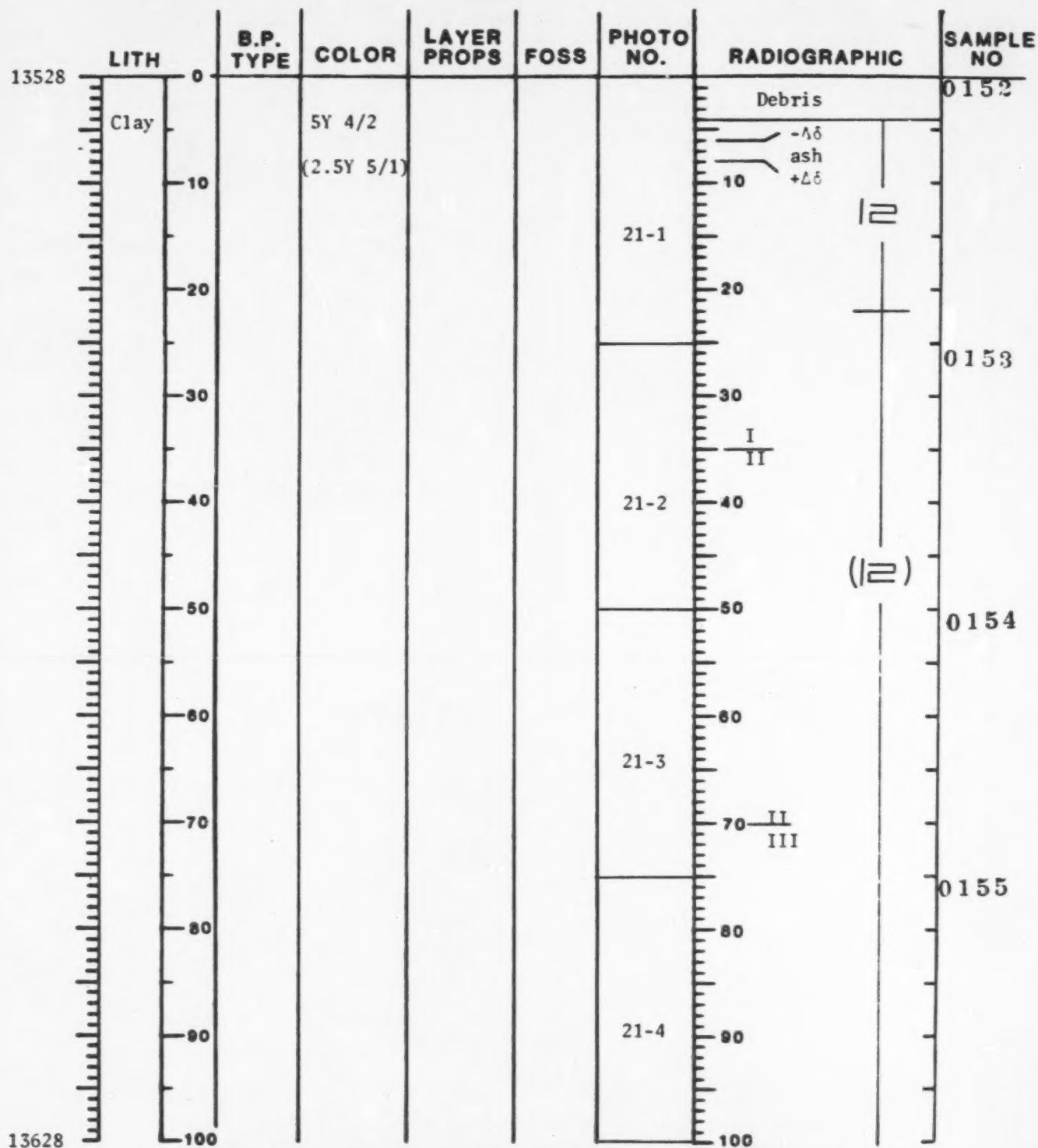
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 20 DEPTH 13523 to 13528 cm

DESCRIBED BY LAF and JDS DATES MAR 3 1991 and MAR 3 1991 SHEET 4 of 4

13523		LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13528		Clay		5Y 4/2			20-12	MASSIVE	
		10						310	
		20							
		30							
		40							
		50							
		60							
		70							
		80							
		90							
		100							

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 21 DEPTH 13528 to 13628 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 1 of 3



CORE LINER HAND CUT, LINER DEBRIS DISSEMINATED THROUGHOUT SEGMENT.
LONG VERTICAL GROOVES IN SEGMENT CAUSED BY CORE SPLITTER.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 21 DEPTH 13628 to 13728 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 2 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13628	0							
	Clay		5Y 4/2				III end film 1	0156
			(2.5Y 5/1)				IV	
						21-5	110- $\approx$ = VIV.	
							120	
	Fractured							0157
							130	
	Clay						- $\approx$ = VIV.	
						21-6	IV	
							140 V	
							- $\approx$ = VIV.	
							150 ($\neq$)?	0158
						21-7	160- $\neq$ = VIV.	
							- $\neq$ = VIV.	
							170	0159
							V end film 2	
							VI	
							180 V	
						21-8	V	
							190	0160
13728	100						200	

BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 21 DEPTH 13728 to 13755 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 3 of 3

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13728	0		5Y 4/2					
	10		(2.5Y 5/1)			21-9	210 ^{III} IV (12)	0161
	20						220	
13755	30						230	
	40						240	
	50						250	
	60						260	
	70						270	
	80						280	
	90						290	
	100						300	

BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 22 DEPTH 13822 to 13884 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1931 and MAR 6 1931 SHEET 1 of 4

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0		5Y 4/2				FRACTURED	
Debris		(2.5Y 4/1)			22-1		
10							
20							
30							
13822						I II	
40					22-2		
Clay						($\neq$)	
50							016?
60					22-3		
70						70 II III	
80							0163
Ash?					22-4		
90							
100							

VIVIANITE VEINLETS AND GRANULES THROUGHOUT. BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 22 DEPTH 13884 to 13984 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13884	Clay							
		Sand	5Y 4/2 (2.5Y 4/1)	Fractured		22-5	III end film 1 110 IV	0164
							(≠)	
						22-6	IV V	0165
						22-7	FRACTURED	0166
						22-8	V VI	0167
				Fractured				S.
13984								

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 22 DEPTH 13984 to 14084 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1961 and 1 6 1961 SHEET 3 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
13984	0							
	Clay		5Y 4/2					
			(2.5Y 4/1)					0168
	10			Fractured		22-9	210 FRACTURED	
	20						220 end film 2	
	30						230	
	40					22-10	240 NO RADIOGRAPH	
	50						250	
	60						260	
	70					22-11	270	
	80							0169
	90						280	
				Fractured		22-12	290	
14084	100						300	

INTERVAL FROM 287cm - 300cm WAS DIFFICULT TO CUT FOR RADIOGRAPH.

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 22 DEPTH 14084 to 14089 cm

DESCRIBED BY LAF and JAP DATES MAR 6 1941 and MAR 6 1961 SHEET 4 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
14084	0		5Y 4/2			22-13	NO RADIOGRAPH	
14089	Debris		(2.5Y 4/1)					
	10						310	
	20							
	30							
	40							
	50							
	60							
	70							
	80							
	90							
	100							

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT _____ DEPTH _____ to _____ cm

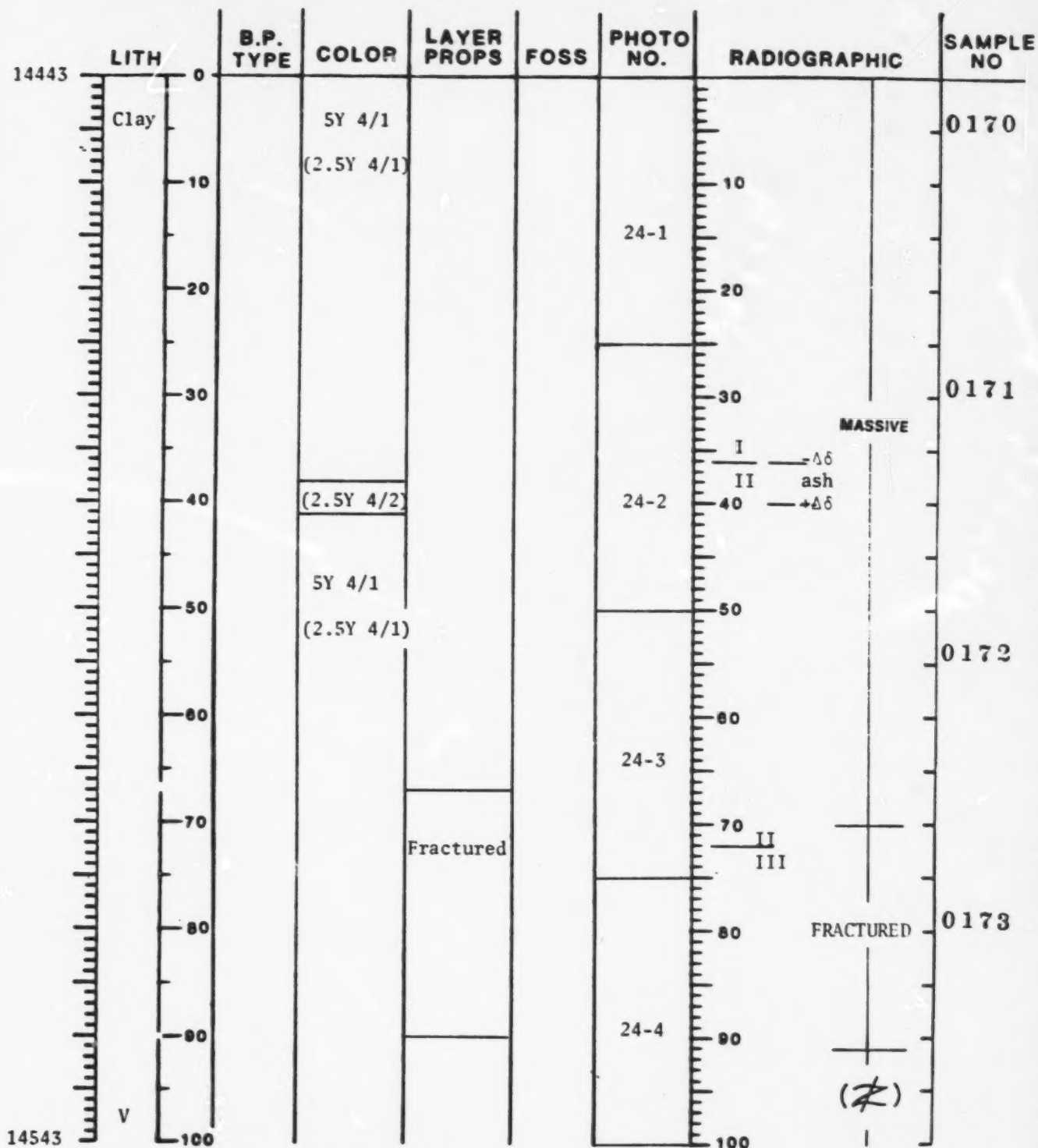
DESCRIBED BY LAF and _____ DATES MAR 12 1961 and _____ SHEET _____ of _____

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

NO SAMPLE
RECOVERED

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 24 DEPTH 14443 to 14543 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 1 of 4



BIOTURBATION THROUGHOUT.

SLIGHT DESSICATION IN SEGMENT BETWEEN 0 - 50cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 24 DEPTH 14543 to 14643 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and 12 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
14543	0							
	Clay		5Y 4/1				III IV	0174
	10		(2.5Y 4/1)			24-5	110	
	20						120	
	30		(2.5Y 5/4)				130	0175
	40		5Y 4/1 (2.5Y 4/1)			24-6	140 IV V	
	50						150	
	60					24-7	160	0176
	70						170 V VI	
	80						ash? -Δδ +Δδ	
	90					24-8	180	0177
14643	100						190 200	

BIOTURBATION AND INDISTINCT, SLIGHTLY DISTURBED LENTICULAR WAVY LAMINATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 24 DEPTH 14643 to 14743 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and 12 1-81 SHEET 3 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
14743	0		5Y 4/1					0178
	10		(2.5Y 4/1)			24-9	210 $\frac{VI}{VII}$ (#)	
	20						220	
	30			Highly Fractured			230	0179
	40					24-10	240	
	50						250 NO RADIOGRAPH	
	60					24-11	260	
	70						270	
	80						280	0180
	90					24-12	290	
14743	100						300	

INTERVAL BETWEEN 276cm - 305cm IS SLIGHTLY DESSICATED.

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 24 DEPTH 14743 to 14748 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 4 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
14743	0		5Y 4/1			24-12		
14748	Clay		(2.5Y 4/1)	Fractured				
	10						310	
	20							
	30							
	40							
	50							
	60							
	70							
	80							
	90							
	100							

LAKE CLEAR LAKE, CALIF.-CORE CL-80-2 SEGMENT 25 DEPTH 14748 to 14848 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and 12 1981 SHEET 1 of 2

14748	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	Clay		5Y 4/2				-Δδ ash	0181
			(2.5Y 5/1)			25-1	Δδ	
							10	
							20	
							30	0182
						25-2	I II	
							40	
							50	
						25-3	II III	0183
							60	
							70	
						25-4	80	0184
							90	
14848							100	

CORE LINER HAND CUT, LINER DEBRIS DISSEMINATED THROUGHOUT SEGMENT. LONG VERTICAL GROOVES IN SEGMENT CAUSED BY CORE SPLITTER. MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 25 DEPTH 14848 to 14918 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and APR 12 1981 SHEET 2 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPL NO
14848	0		5Y 4/2				III	0185
			5Y 5/3				IV	
	10		(2.5Y 5/1)			25-5	110	
	20						120	
	30						((#))	0186
	40					25-6	140 IV V	
	50		5Y 4/2				150	0187
	60		(2.5Y 5/1)			25-7	160	
							((#))	
	Debris						NO RADIOGRAPH	
14918	70						170	
	80						180	
	90						190	
	100						200	

MASSIVE AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE 2 SEGMENT 26 DEPTH to cm

DESCRIBED BY and DATES and SHEET of

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

SEGMENT 26 LOST IN TRANSPORT

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 27 DEPTH 15358 to 15458 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 1 of 4

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
15358	0						
Clay		5Y 4/2					
	10	(2.5Y 4/1)			27-1		
	20						0188
	30						
	40				27-2		
	50					MASSIVE	0189
	60		Fractured				
	70				27-3	FRACTURED	0190
	80					DRILLING DISTURBANCE	
	90				27-4		
15458	100		Fractured			NO RADIOGRAPH	0191

CORE LINER HAND CUT, LINER DEBRIS DISSEMINATED THROUGHOUT SEGMENT. LONG VERTICAL GROOVES IN SEGMENT CAUSED BY CORE SPLITTER. SLIGHT DESSICATION BETWEEN INTERVAL 0cm - 51cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 27 DEPTH 15458 to 15558 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
15458	0		5Y 4/2					
	Clay		(2.5Y 4/1)	Fractured		27-5		
	10							
	20							
	30						NO RADIOGRAPH	
	40					27-6		
	50							0192
	60							
	70					27-7		
	80							
	90							
	100					27-8		
15558								

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 27 DEPTH 15558 to 15658 cm

DESCRIBED BY LAF and IDS DATES MAR 12 1981 and MAR 12 1981 SHEET 3 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
15558	0							
	Clay		5Y 4/2					
	10		(2.5Y 4/1)			27-9	210 V VI	
	20						220	0195
	30						230 -Δδ ash +Δδ	
	40					27-10	240	
	50						Vi 250 VII	0196
	60					27-11	260	
	70						270	0197
	80						-Δδ ash +Δδ	
	90					27-12	280 VII VIII	
	100						290	0198
15658				Fractured			300	

BIOTURBATION THROUGHOUT.

DESCRIBED BY LAF and JDS DATES MAR 12 1961 and MAR 12 1961 SHEET 4 of 4

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LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 28 DEPTH 15663 to 15763 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 1 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
15663	0							
	Clay		5Y 4/2 (2.5Y 5/1)	Fractured			FRACTURED	
	10					28-1		0199
	20							
	30						I II	
	40					28-2		0200
	50		5Y 4/2 (2.5Y 4/1)				MASSIVE	
	60							
	70					28-3	II III	0201
	80							
	90					28-4		0202
15763	100							

SEGMENT BECOMES MORE CARBONACEOUS TOWARDS BOTTOM. BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 28 DEPTH 15763 to 15810 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and P 13 1981 SHEET 2 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
15763	0		5Y 4/2 (2.5Y 4/1)				III IV	
	Silty Clay		5Y 4/2 (2.5Y 3/1)			28-5	110 -Δδ ash? 120 +Δδ	0203
			5Y 4/2 (2.5Y 4/3)			28-6	130 MASSIVE	
				Fractured			140	0204
15810							150	
							160	
							170	
							180	
							190	
							200	

LAKE CLEAR LAKE, CALIF.-CORE CL-80-2 SEGMENT 29 DEPTH 15968 to 16050 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 1 of 4

LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
0							
Debris		5Y 4/2					
10		(2.5Y 5/1)					
20			Fractured		29-1		0205
Clay							
30						FRACTURED	
40					29-2		0203
50							
60					29-3		0207
70						MASSIVE	
80						-Δδ ash? +Δδ	
90					29-4	-Δδ ash +Δδ	0206
100							

16050

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 29 DEPTH 16050 to 16150 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 2 of 4

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
16050	0							
	Clay		5Y 4/2				~~7~~	
	10		(2.5Y 5/1)			29-5	110	0209
	20						120	
	30						III 130 IV	
	40					29-6	FRACTURED 140	0210
	50						-Δδ 150 ash? +Δδ	
	60					29-7	(~~7~~) 160	0211
	70			Fractured			170 -Δδ	
	80						ash +Δδ 180	
	90					29-8	190	0212
16150	100						200 V VI	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 29 DEPTH 16150 to 16250 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 3 of 4

16150	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	Clay		5Y 4/2 (2.5Y 5/1)					
						29-9	210	0213
							220 -Δδ ash +Δδ	
							230	
							VI	
						29-10	VII	0214
				Fractured			240	
							250	
							(#)	
						29-11	260	0215
							270 VII VIII	
							280	
						29-12	290	0216
16250							300	

DESCRIBED BY LAF and JAC DATES MAR 13 1981 and MAR 13 1991 SHEET 4 of 4

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LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 30 DEPTH 16273 to 16373 cm

DESCRIBED BY LAF and IDS DATES MAR 13 1981 and MAR 13 1981 SHEET 1 of 2

16273	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
	0		5Y 4/2					
	10		(2.5Y 5/1)			30-1		0217
	20							
	30							
	40					30-2	I II	0213
	50						(≈)	
	60						-Δδ	
	70						ash?	
	80						+Δδ	
	90					30-3		0219
	100						70 II end film 1 III	
							-Δδ	
							+Δδ	
							-Δδ	
						30-4		0220
							12	
							+Δδ	
16373							(≠)	

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 30 DEPTH 16373 to 16403 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1991 and MAR 13 1991 SHEET 2 of 2

	LITH	B.P. TYPE	COLOR	LAYER PROPS	FOSS	PHOTO NO.	RADIOGRAPHIC	SAMPLE NO
16373	0		5Y 4/2				-Δδ ash? +Δδ III IV 110	0221
	10		(2.5Y 5/1)			30-5	(≠)	
	20						120	
	30						130 IV end film 2	0222
16403	30							
	40						140	
	50						150	
	60						160	
	70						170	
	80						180	
	90						190	
	100						200	

APPENDIX B

SAMPLE CATALOG

Core subsampling was conducted for analyses listed in table 6. The core was first split lengthwise, and the two core halves were photographed on black-and-white and color film. An 8-mm-thick slice from the center of the core was then removed and X-ray radiographed. After the radiograph was developed and examined to determine the extent of sediment disruption and the amount of contained debris, the core slice and one of the core halves were cut up for individual samples according to the plan shown in figure 6 (described below). The remaining core half was sealed in a 6-mil polyethylene bag as an archive sample.

Specifically, the subsampling proceeded as follows: palynology (Pln) and weight loss (WtL) samples were removed from the working core half; these are volumetric samples, using methods described in Beaver and others (1976). Other samples (Org, PPg, Hg, AAc, GrS, Cly, Dtm, Ost, MFs, and Xbm) shown in figure 6 were then removed at the appropriate sample intervals and sealed in polyethylene bags. Both palynology (Pln) and macrofossil (MFs) sample bags contain added ethyl alcohol to retard mold growth.

Only two other types of samples were taken, volcanic ash (ash) and special, or extra (EX). Volcanic ash samples were removed from the core after examination of the X-ray radiographs because not all ash beds are apparent on the split core surfaces. Ash samples were taken from both core halves and the core (radiograph) slice in order to obtain as much volcanic material as possible. Special samples were taken for woody plant fragments and for unidentified objects. Four special samples have sample numbers that begin

Table 6. Sample types, status, and volume and the sampling interval.

Mnemonic	Analysis	Status ^{1/}	Sample Vol. (cm ³) ^{2/}	Sample Interval (m.) ^{3/}
Org	Organic geochemistry	F	10	1
PPg	Plant pigments	F	10	1
Hg	Mercury content	F	5	1
AAc	Amino Acid	F	140	10
GrS	Grain size	W	5	1
Cly	Clay Mineralogy	W	5	1
Pln	Palynology	W ^{4/}	4.4	0.25
Dtm	Diatoms	W	5	2
Ost	Ostracods	W	140	2
MFs	Macrofossils	W ^{4/}	140	1
Xbm	X-ray bulk mineralogy	W	5	1
WtL	Weight loss	D	1.7	1
C14	Radiocarbon date ^{5/}			
ash	Ash	W	variable	variable
EX	Extra	W	variable	variable

^{1/} F = frozen, W = wet and unrefrigerated, D = dry.

^{2/} Approximate volumes except for palynology and weight loss.

^{3/} Sample intervals are to closest stated distance between samples. Adjustment of sample interval was made for unrecovered core. See catalog for exact sample locations.

^{4/} Palynology and macrofossil samples have 10 ml and 40 ml, respectively, of 95 percent denatured ethyl alcohol added to retard mold growth.

^{5/} No radiocarbon samples were taken.

with an "S"; these are the woody samples.

In one case the length of core segment recovered is greater than the length of the interval cored owing to sediment expansion after retrieval of the segment. The increased length results in overlap with the subjacent segment. However, the apparent stratigraphic reversal is solely due to the sediment expansion. The segment involved is number 11, and no samples are affected by this apparent stratigraphic reversal.

Use of catalog

This catalog consists of segment by segment listings of sample types, their sample number, and respective depth. All samples from a given depth interval have the same sample number; the intended use of each sample is noted on the sample label (fig. 7), which is taped to the polyethylene bag containing the sample. The existence of a sample is noted in the catalog by an x-mark in the respective sample column and the depth and sample number are specified in the same row in the left-hand column of the page. All samples have a serial four-digit number, ranging from 1111 to 1222, except the four

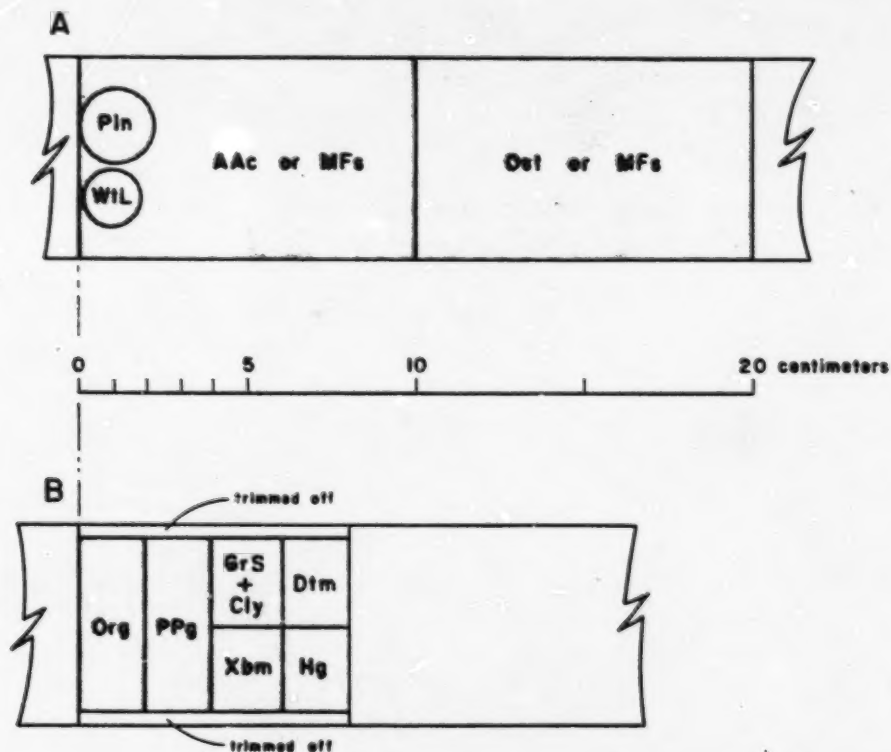


Figure 6. Plan view of a sampled interval from working core half (A) and 8-mm-thick core (radiograph) slice (B). Core top is to the left. At sample depth, here marked 1 cm on the scale, subsamples are taken in order shown. However, not all the samples in every sampled interval were necessarily taken; see table 6 for sample intervals. In the case where less than the maximum number of samples were taken then the samples are taken closer to the recorded depth (modified from Rymer and others, 1981).

special samples that have prefixes of "S". The number of radiographs required to cover a segment is noted in the far right-hand column, entitled "Radiograph", of each segment in the sample catalog.

To determine if a sample or sample suite exists for a specific interval first consult figure 2, which summarizes core recovery. If core was recovered for the interval in question, go to the catalog and search until the desired depth is found. Then, the mnemonic columns may be consulted to see what samples exist for the interval in question. If no samples exist, one may request additional sampling.

CLEAR LAKE			
CORE _____		SEG _____	
DEPTH _____		m	
ost	min	FS	ash
mag	pollen	D	macro
NO _____			

Figure 7. Example of sample label, showing blank spaces for core name (CL-81-2 for this core and catalog), segment number, and depth. Depths given are always relative to the top of core CL-81-2 (the mud-water interface) and not the top of the respective segment. Sample number is recorded at the bottom of the label. Between the depth and sample number spaces there are abbreviations for subsamples; the appropriate abbreviation is circled for each sample taken. The abbreviations respectively correspond to the mnemonics in the catalog as follows: Ost, Xbm, GrS, ash, Mag, Pln, Dtm, and MFs. The appropriate mnemonic for other samples (Org, PPg, and Hg) is written in the space below the abbreviations when a sample is taken for the respective analysis (from Rymer and others, 1981).

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 1 SAMPLED BY 1af DATE 1/1/81

DEPTH (cm)	SPL. NO.	FROZEN				WET							SPECIAL					Number of Radiographs= 2	
		Org	PPg	Hg	AAC	Gr-S	Cl'y	Pin	Dtm	Ost	NF's	Xbm	WEL	Iso	Mag	C14	ash		IW
5386	0001																		
5411	0002																		
5436	0003																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 2 SAMPLED BY 1af DATE 1/9/81

DEPTH (cm)	SPL. NO.	FROZEN				WET							SPECIAL					Number of Radiographs= 3	
		Org	PPg	Hg	AAC	Gr-S	Cl'y	Pin	Dtm	Ost	NF's	Xbm	WEL	Iso	Mag	C14	ash		IW
5607	0004	x	x	x		x	x	x			x		x	x					
5632	0005																		
5657	0006																		
5682	0007																		
5707	0008	x	x	x		x	x	x	x	x	x		x	x					
5732	0009																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 3 SAMPLED BY 1af DATE 1/16/81

DEPTH (cm)	SPL. NO.	FROZEN				WET							SPECIAL					Number of Radiographs= 2	
		Org	PPg	Hg	AAC	Gr-S	Cl'y	Pin	Dtm	Ost	NF's	Xbm	WEL	Isc	Mag	C14	ash		IW
5892	0010																		
5917	0011																		
5942	0012	x	x	x		x	x	x			x		x	x					
5967	0013																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 4 SAMPLED BY 1af DATE 1/19/81

DEPTH (cm)	SPL. NO.	FROZEN				WET							SPECIAL					Number of Radiographs= 3	
		Org	PPg	Hg	AAC	GPS	Cl'y	Pin	Dtm	Ost	NF's	Xbm	WEL	Iso	Mag	C14	ash		IW
6209	0014																		
6234	0015																		
6284	0016	x	x	x		x	x		x	x	x			x	x				
6309	0017																		
6334	0018																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 5 SAMPLED BY 1af DATE 1/20/81

DEPTH (cm)	SPL. NO.	FROZEN				WET							SPECIAL					Number of Radiographs= 1		
		Org	PPg	Hg	AAC	Gr-S	Cl'y	Pin	Dtm	Ost	NF's	Xbm	WEL	Iso	Mag	C14	ash		IW	EX
6515	0019																			
6540	0020	x	x	x		x	x	x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 6 SAMPLED BY 1af DATE 1/22/81

DEPTH (cm)	SPL. NO.	FROZEN				WET							SPECIAL					Number of Radiographs= 2	
		Org	PPg	Hg	AAC	GrS	Cl'y	Pl'n	Dtm	Ost	NF's	Xbm	WEL	Iso	Mag	C14	ash		IW
6807	0021																		
6832	0022																		
6857	0023	x	x	x		x	x		x	x	x		x	x					
6877	0024																		
6902	0025																		
6927	0026																		
6952	0027																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 7 SAMPLED BY 1af DATE 1/23/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs=	
		Org	PPg	Hg	AAC	GPS	Cl'y	Pin	Dtm	Ost	Nfs	Xbm	WEL	Iso	Mag	C14	ash	IW		EX
7132	0028	x	x	x		x	x				x			x	x					3
7157	0029																			
7182	0030																			
7207	0031																			
7232	0032	x	x	x		x	x				x			x	x					
7257	0033																			
7282	0034																			
7307	0035																			
7332	0036	x	x	x		x	x			x	x	x		x	x					
7357	0037																			
7382	0038																			

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 8 SAMPLED BY laf DATE 1/29/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY							SPECIAL					Number of Radiographs=		
		Org	PPg	H ₂	AAC	GPS	Cty	Pin	Dem	Ust	Nfs	Xbm	WEL	Iso	Mag	C14	ash		IW	IX
7426	0039																			3
7451	0040	x	x	x	x	x	x				x		x	x						
7476	0041																			
7501	0042																			
7526	0043																			
7551	0044	x	x	x		x	x		x	x	x		x	x						
7576	0045																			
7601	0046																			
7626	0047																			

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 9 SAMPLED BY laf DATE 1/30/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY										SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dem	Ust	Nfs	Xbm	WEL	Iso	Mag	C14	ash	IW	EX		
9874	0048	x	x	x		x	x				x		x	x							
9899	0049																				
9924	0050																				
9949	0051																				
9974	0052	x	x	x		x	x	x	x	x	x			x	x						
9999	0053																				
10024	0054																				
10049	0055																				
10074	0056	x	x	x		x	x	x				x		x	x						
10099	0057																				

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 10 SAMPLED BY laf DATE 2/6/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY							SPECIAL					Number of Radiographs=		
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dem	Ust	Nfs	Xbm	WEL	Iso	Mag	C14	ash		IW	EX
10183	0058																			
10213	0059																			
10243	0060	x	x	x		x	x	x	x	x	x		x	x						
10268	0061																			
10293	0062																			
10318	0063																			
10343	0064	x	x	x		x	x	x			x		x	x						
10378	0065																			
10393	0066																			
10418	0067																			
10443	0068	x	x	x		x	x	x	x	x	x		x	x						
10468	0069																			

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 11 SAMPLED BY laf DATE 2/12/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY							SPECIAL					Number of Radiographs= 2	
		Org	PPg	Hg	AAC	SPS	Cty	Pin	Dem	Ust	Nfs	Xbm	WEL	Iso	Mag	C14	ash		IW
10488	0070																		
10513	0071																		
10538	0072	x	x	x		x	x	x			x		x	x					
10563	0073																		
10588	0074																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 12 SAMPLED BY laf DATE 2/12/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY							SPECIAL					Number of Radiographs=		
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dem	Ust	Nfs	Xbm	WEL	Iso	Mag	C14	ash		IW	EX
10804	0075																			3
10829	0076	x	x	x		x	x	x	x	x	x		x	x						
10854	0077																			
10879	0078																			
10904	0079																			
10929	0080	x	x	x	x	x	x	x			x		x	x						
10954	0081																			
10979	0082																			
11001	0083																			
11004	0083																			
11029	0084	x	x	x		x	x	x	x	x	x		x	x						
11054	0085																			
11079	0086																			

x-----wood

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 13 SAMPLED BY taf DATE 2/13/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY							SPECIAL					Number of Radiographs= 2
		Org	PPg	Hg	AAC	GrS	ClY	Pln	Dtm	Ust	MFs	Xbm	Wcl	Iso	Mag	Cl4	ash	
11105	0087																	
11130	0088	x	x	x		x	x	x			x		x	x				x-----gray powdery object
11155	0089																	
11180	0090																	
11205	0091																	
11230	0092	x	x	x		x	x	x	x	x	x		x	x				
11255	0093																	

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 14 SAMPLED BY taf DATE 2/16/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY							SPECIAL					Number of Radiographs= 3	
		Org	PPg	Hg	AAC	GPS	ClY	Pln	Dtm	Ust	MFs	Xbm	Wcl	Iso	Mag	Cl4	ash		EW
11413	0094																		
11438	0095																		
11463	0096	x	x	x		x	x	x			x		x	x					
11478	S002																		x-----wood
11488	0097																		
11513	0098																		
11538	0099																		
11563	0100	x	x	x		x	x	x	x	x	x		x	x					
11588	0101																		
11613	0102																		
11638	0103																		
11663	0104	x	x	x		x	x	x			x		x	x					
11688	0105																		

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 15 SAMPLED BY taf DATE 2/19/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY								SPECIAL					Number of Radiographs= 1
		Org	PPg	Hg	AAC	GrS	ClY	Pln	Dtm	Ost	MFs	Xbm	Wcl	Iso	Mag	Cl4	ash	IX	
11780	0106	x	x	x		x	x	x	x	x	x		x	x					

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 16 SAMPLED BY taf DATE 2/19/81

DEPTH (cm)	SPL. NO.	FROZEN				WEY								SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GrS	ClY	Pln	Dtm	Ust	MFs	Xbm	WEL	Iso	Mag	Cl4	ash	IW	
12015	0107																		
12040	0108																		
12065	0109																		
12085	S003																		
12090	0110	x	x	x		x	x	x			x		x	x					x-----wood
12115	0111																		
12140	0112																		
12165	0113																		
12190	0114	x	x	x		x	x	x	x	x	x		x	x					
12215	0115																		
12240	0116																		
12265	0117																		
12290	0118	x	x	x	x	x	x	x			x		x	x					

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 17 SAMPLED BY taf DATE 2/26/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GrS	ClY	Pln	Dtm	Ust	MFs	Xbm	Wcl	Iso	Mag	Cl4	ash	IW	
12315	0119																		
12340	0120							x											
12365	0121							x											
12390	0122	x	x	x		x	x	x	x	x	x		x	x					
12415	0123							x											
12440	0124							x											
12465	0125							x											
12505	0126	x	x	x		x	x	x		x			x	x					
12565	0127							x											
12550	0128							x											
12575	0129							x											

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 18 SAMPLED BY taf DATE 3/5/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dtm	Ust	WPs	Xbm	WEL	ISO	Mag	C14	ash	IW	
12633	0130	x	x	x		x	x		x	x	x		x	x					
12658	0131								x										
12773	0132								x										
12798	0133								x										
12823	0134	x	x	x		x	x				x		x	x					
12846	0135								x										
12873	0136								x										
12898	0137								x										

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 19 SAMPLED BY taf DATE 3/5/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs = 1
		Org	PP _g	Hg	AAC	GPS	Cty	Pin	Dtm	Ust	WPs	Xbm	WEL	ISO	Mag	C14	ash	IW	
12931	0138	x	x	x		x	x	x	x	x	x		x	x					
12956	0139							x											
12981	0140							x											

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 20 SAMPLED BY taf DATE 3/5/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 3	
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dtm	Ust	WPs	Xbm	WEL	ISO	Mag	C14	ash	IW		EX
13231	0141																			
13276	0142	x	x	x		x	x	x			x		x	x						
13301	0143							x												
13326	0144							x												
13351	0145							x												
13376	0146	x	x	x		x	x	x	x	x			x	x						
13401	0147							x												
13426	0148							x												
13451	0149							x												
13476	0150	x	x	x		x	x	x			x		x	x						
13501	0151							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 21 SAMPLED BY taf DATE 3/9/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dtm	Ust	WPs	Xbm	WEL	ISO	Mag	C14	ash	IW	
13529	0152							x											
13554	0153							x											
13580	0154	x	x	x		x	x	x	x	x			x	x					
13605	0155							x											
13630	0156							x											
13655	0157							x											
13680	0158	x	x	x	x	x	x	x		x			x	x					
13705	0159							x											
13730	0160							x											
13755	0161							x											

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 22 SAMPLED BY taf DATE 3/6/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 2
		Org	PPg	Hg	AAC	GPS	Cty	Pin	Dtm	Ust	WPs	Xbm	WEL	ISO	Mag	C14	ash	IW	
13837	0162	x	x	x		x	x	x	x	x	x		x	x					
13862	0163							x											
13887	0164							x											
13912	0165							x											
13937	0166	x	x	x		x	x	x			x		x	x					
13962	0167							x											
13975	5004																		
13987	0168							x											
14057	0169	x	x	x		x	x	x	x	x	x		x	x					

x-----wood

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 24 SAMPLED BY 1af DATE 3/12/81

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GPS	Cly	Pin	Dtm	Ost	W's	Xbm	WEL	Iso	Meg	CT4	ash	IW	
14447	0170	x	x	x		x	x				x		x	x					
14472	0171							x											
14497	0172							x											
14522	0173							x											
14547	0174	x	x	x		x	x	x	x	x	x		x	x					
14572	0175							x											
14597	0176							x											
14622	0177							x											
14647	0178	x	x	x		x	x	x			x		x	x					
14672	0179							x											
14725	0180	x	x	x		x	x	x	x	x	x		x	x					

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 25 SAMPLED BY 1af DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN				WET								SPECIAL					Number of Radiographs= 2
		Org	PPg	Hg	AAC	GPS	Cly	Pin	Dtm	Ost	W's	Xbm	WEL	Iso	Meg	CT4	ash	IW	
14749	0181							x											
14774	0182							x											
14799	0183							x											
14825	0184	x	x	x		x	x	x			x		x	x					
14850	0185							x											
14875	0186							x											
14900	0187							x											

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 27 SAMPLED BY 1af DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN				WEY								SPECIAL					Number of Radiographs= 3
		Org	PPg	Hg	AAC	GPS	Cly	Pin	Dtm	Ost	W's	Xbm	WEL	Iso	Meg	CT4	ash	IW	
15378	0188	x	x	x		x	x		x	x	x		x	x					
15403	0189							x											
15428	0190							x											
15453	0191							x											
15503	0192	x	x	x	x	x	x			x			x	x					
15528	0193							x											
15553	0194							x											
15578	0195							x											
15603	0196	x	x	x		x	x	x	x	x			x	x					
15628	0197							x											
15653	0198							x											

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 28 SAMPLED BY 1af DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN				WEY								SPECIAL					Number of Radiographs= 2
		Org	PPg	Hg	AAC	GPS	Cly	Pin	Dtm	Ost	W's	Xbm	WEL	Iso	Meg	CT4	ash	IW	
15678	0199																		
15703	0200	x	x	x		x	x	x			x			x	x				
15728	0201							x											
15753	0202							x											
15778	0203							x											
15803	0204	x	x	x		x	x	x	x	x	x			x	x				

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 29 SAMPLED BY 1af DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN				WEY								SPECIAL					Number of Radiographs= 3	
		Org	PPg	Hg	AAC	G-S	Cly	Pin	Dtm	Ost	W's	Xbm	WEL	Iso	Meg	CT4	ash	IW		EX
15943	0205																			
15993	0206																			
16018	0207																			
16043	0208	x	x	x		x	x					x		x	x					
16068	0209																			
16093	0210																			
16118	0211																			
16143	0212	x	x	x		x	x		x	x	x			x	x					
16168	0213																			
16193	0214																			
16218	0215																			
16243	0216	x	x	x		x	x	x				x		x	x					

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 30 SAMPLED BY 1af DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN				WEY								SPECIAL					Number of Radiographs= 2
		Org	PPg	Hg	AAC	W-S	Cl	Pin	DEM	OST	W's	NDM	WLL	ISO	Mag	Cl4	ash	IV	
16284	0217																		
16309	0218																		
16334	0219																		
16354	0220	x	x	x			x	x		x	x	x			x	x			
16379	0221																		
16400	0222																		